

For Reference

NOT TO BE TAKEN FROM THIS ROOM

Ex LIBRIS
UNIVERSITATIS
ALBERTAEENSIS



BRUCE PEEL SPECIAL COLLECTIONS LIBRARY
UNIVERSITY OF ALBERTA LIBRARY

REQUEST FOR DUPLICATION

I wish a photocopy of the thesis by

Leibovitch, Howard Y (author)

entitled Application of autopoietic theory

The copy is for the sole purpose of private scholarly or scientific study and research. I will not reproduce, sell or distribute the copy I request, and I will not copy any substantial part of it in my own work without permission of the copyright owner. I understand that the Library performs the service of copying at my request, and I assume all copyright responsibility for the item requested.

THE UNIVERSITY OF ALBERTA

RELEASE FORM

NAME OF AUTHOR HOWARD Y. LEIBOVITCH

TITLE OF THESIS APPLICATION OF AUTOPOIETIC THEORY IN A
 SYSTEMS ANALYSIS OF A SMALL GROUP

DEGREE FOR WHICH THESIS WAS PRESENTED MASTER OF EDUCATION

YEAR THIS DEGREE GRANTED FALL, 1983

Permission is hereby granted to THE UNIVERSITY OF ALBERTA LIBRARY to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific research purposes only.

The author reserves other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without the author's

THE UNIVERSITY OF ALBERTA

APPLICATION OF AUTOPOIETIC THEORY IN A SYSTEMS ANALYSIS OF A
SMALL GROUP

by



HOWARD Y. LEIBOVITCH

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF MASTER OF EDUCATION

IN

COUNSELLING PSYCHOLOGY

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

EDMONTON, ALBERTA

FALL, 1983



Digitized by the Internet Archive
in 2019 with funding from
University of Alberta Libraries

<https://archive.org/details/Leibovitch1983>

THE UNIVERSITY OF ALBERTA
FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled APPLICATION OF AUTOPOIETIC THEORY IN A SYSTEMS ANALYSIS OF A SMALL GROUP submitted by HOWARD Y. LEIBOVITCH in partial fulfilment of the requirements for the degree of MASTER OF EDUCATION in COUNSELLING PSYCHOLOGY.

ABSTRACT

This study is a descriptive analysis of a small group utilizing outer and inner phenomenological methods of description. The subjects for the study was the Experimental Psychotherapy Centre which consisted of seven psychotherapists who met one evening a week at the University of Alberta to work as a therapy team while utilizing strategic psychotherapy methods. The data base for the study were post therapy debrief sessions in which all members and guests took part. Units of analysis were whole debrief sessions and segments of the debrief sessions which were defined by the author as a sequence of speeches which made up the presentation of a single idea, topic, or topic perspective.

A review of the literature on small group research demonstrated the inadequacy of applying the traditional linear paradigms or General Systems Theory for the studying of human social studies. Linear approaches tended to use methods that repackaged the phenomena those theories attempted to explain into a more abstract frame. General Systems Theory was perceived as being incomplete for it did not explicitly address the role of the researcher in the research and it did not differentiate between descriptions of how the system was organized derived from the investigator's domain of description (outer phenomenological method) and descriptions of organizational properties of human systems that lie outside an investigator's domain of

description (inner phenomenological method).

Autopoietic theory provides an explicit accounting for the role of the observer relating to the subjective origins of investigations. A major premise of autopoietic theory is that living systems are perceived as being organizationally closed. The theory distinguishes between a domain of description which entails statements about a system made by an observer community and a domain of autopoiesis which specifies the organizational and structural characteristics of the system independent of how it is described. Both a visual method and a verbal descriptive method of presentation were employed in this study to capture the organization of relations among team members from an inner and outer phenomenological perspective. Special emphasis was placed on a discussion of the role of EPC's language in specifying EPC as a closed system in contrast to the set of assumptions concretized through the language as falling in a domain of description.

Autopoietic theory appeared to be useful for studying EPC as it was demonstrated how autopoietic theory could be applied in this form of research. Especially emphasized were how an autopoietic perception of human social systems could facilitate greater tolerance among human social systems and implications for research including the observer as a full partner in the research.

Table of Contents

Chapter	Page
1. INTRODUCTION	1
1.1 Small Group Research	1
1.2 An Alternate Approach	2
1.3 Nature of the Present Study	3
2. LITERATURE REVIEW	5
2.1 Introduction	5
2.2 Small Group Definitions	5
2.3 Approaches in Small Group Research -- Nonsystem Models	7
2.3.1 Sociometric Approach	7
2.3.2 Social Exchange Approaches	8
2.3.3 Thibeault and Kelly's Model	9
2.3.4 Homan's Model	10
2.3.5 A Comment on the Social Exchange Models ..	11
2.3.6 The Interactional Perspective -- Bales Model	13
2.3.6.1 Introduction	13
2.3.6.2 The Perspective	13
2.3.6.3 Research Methods	15
2.3.6.4 A Comment	17
2.4 General Systems Theory	21
2.4.1 Introduction	21
2.4.2 Human Systems Defined as a Social System .	21
2.4.3 Human Interactional Systems as Steady State Systems	24
2.4.4 Equifinality	24

2.4.5	Small Group Research Within a System's Model	25
2.4.6	Summary of Systems Model	28
2.4.7	A Comment on System and Nonsystemic Perspectives in Small Group Research	33
2.5	The Theory of Autopoietic Systems	34
2.5.1	Introduction	34
2.5.2	Definition of Autopoiesis	35
2.5.3	Unique Features of Autopoietic Systems ...	36
2.5.4	Theory of Metaobservation	37
2.5.5	Role of the Observer	38
2.5.6	Properties of an Observer System	39
2.5.7	Coupling	39
2.5.8	Domain of Consensus	40
2.5.9	Two Phenomenological Perspectives	41
2.5.10	Present Study	42
2.6	Summary: A Comparison of GST and Autopoiesis	42
3.	METHOD	44
3.1	Subjects	44
3.1.1	Nature of EPC	44
3.2	Context of the Study	46
3.3	Method	47
4.	RESULTS	49
4.1	Introduction	49
4.1.1	The Tentative Nature of Results	49
4.2	Unit of Analysis	50
4.3	Organizational Characteristics of the EPC	51

4.3.1	Introduction: A Visual Conceptualization of EPC's Organization	52
4.3.2	EPC Specifies Itself Within a Variety of Interactional Forms	52
4.3.3	Different System Members Are Engaged in Interaction in Different Segments	53
4.3.4	Some System Members Participate in Verbal Interaction More Often than Others	55
4.3.5	Involvement Differentiation From an Inner Phenomenological Perspective	58
4.3.6	Life Span of Different Segments as Centering Around a Content Area Vary	59
4.4	The Language of EPC	62
4.4.1	Introduction	62
4.4.2	Origin and Characteristics of the Language	62
4.4.3	Set of Assumptions that Guide EPC's Behavior	63
4.4.4	Summary	69
4.5	Language and Set of Assumptions Belong to Two different Phenomenological Domains	70
5.	DISCUSSION	73
5.1	Introduction	73
5.2	Summary Statements About EPC	74
5.3	Autopoietic or Allopoietic	75
5.3.1	Differences Between a Conversational and Consensual Domains	76
5.3.2	EPC Exists Within Everchanging Structures	76
5.3.3	EPC as Part of a Larger Ecosystem	77
5.3.4	System Within System Within System	79
5.3.5	The Individual in Human Systems	82

5.4 Differences Between Biological and Human Systems	83
5.5 Future Research	86
5.6 Limitations	88
5.7 Implications in the Area of Psychotherapy	89
5.8 Some Concluding Comments: Metaresearch	91
REFERENCES	95
APPENDIX 1: Tables and Figures	101
APPENDIX 2: Debrief Samples	113

List of Tables

Table	Page
5.1 Number of Speeches by Each Team Member Per Person...	101
5.2 Number of Segments Each Member Participated in Verbal Interaction Per Session.....	102
5.3 Number of Segment Initiations Per Member Per Session.....	103
5.4 Number of Dyads Team Member Participates in Per Session.....	104

List of Figures

Figure	Page
5.1 Visual Conceptualization of Segmental Verbal Interaction Between EPC Members -- November 26, 1983.....	105
5.2 Visual Conceptualization of Segmental Verbal Interaction Between EPC Members -- January 6, 1983.....	106
5.3 Visual Conceptualization of Segmental Verbal Interaction Between EPC Members -- January 30, 1983.....	107
5.4 Visual Conceptualization of Segmental Verbal Interaction Between EPC Members -- February 6, 1983.....	108
5.5 Visual Conceptualization of Segmental Verbal Interaction Between EPC Members -- February 20, 1983: I-X.....	109
5.6 Visual Conceptualization of Segmental Verbal Interaction Between EPC Members -- February 20, 1983.....	110
5.7 Visual Summary of Each of the Five Debrief Sessions.	111

1. INTRODUCTION

Fisher (1974) wrote:

The small group is the oldest and most common of all social organizations. Nations and entire civilizations have come and gone but the small group has continued throughout all recorded history. We belong to families, groups of close friends, groups of associates at work, recreation groups ad infinitum... (p. 2).

1.1 Small Group Research

The commonality of small groups is reflected by the enormous amount of research literature generated across widely diverse perspectives and orientations. Some of these approaches include sociometric models, reference theory (Lewin, Sherif), psychoanalytic theory (Bion, Becker), mathematical models (Heider), cognitive theory (Festinger) and social system theory (Bales, Parsons, Homans).

In the past twenty-five years, much of attention has been devoted to investigating a particular small group - families. A fair amount of the research was generated within the context of general systems theory (Watzlawick et al., 1967; Haley, 1968; Jackson, 1968; Weakland; Bateson, 1972, 1979; Hansen, 1981 and others) focusing on the relations among family members as reflected through their interactions. This model of research was an adaptation of cybernetic theory and communication theory developed within the realm of the natural sciences and technology. Within the GST perspective a family is viewed as a system and as such

is characterized by the properties of wholeness and nonsummativity (Watzlawick et al., 1967). By wholeness, is meant that each member influences and is influenced by other family members. The family system behaves "not as a simple composite of independent elements but coherently and as an inseparable whole" (Watzlawick et al., 1967). By nonsummativity is meant that the family as a whole is more than the summation of its component parts. The family structure emerges through the relations of its members. Family systems are generally perceived as "steady-state" systems with more or less stable structures. Forces in the form of deviation amplifying information feedback mechanisms are continuously in a state of interplay with deviation-negating feedback mechanisms. The system is perceived as containing self-corrective mechanisms which usually keeps the variability of family behavior within a certain range. Families are conceived as homeostatic systems in that the system acts to minimize change or maximize stability..

1.2 An Alternate Approach

In recent years, an alternate systems approach has been advocated for investigating small groups and other human social systems. The perspective was developed within the biological realm and its most important conceptualization is that systems determine their own organization through their processes of relations and in a way that the system

structure remains intact. It is through the interactions of the system's components that its organization, function and relationship with the environment are determined. Known as autopoietic system theory this approach differs in many key areas from the GST approach. Systems are perceived as being dynamic and able to tolerate tremendous structural changes without losing their identity. System structures are perceived as process structures as opposed to a more solid or physical conceptualization of structure in GST. Most importantly, autopoietic unities are perceived as closed systems whose organizations are generated and specified by the systems' own processes. In contrast GST conceptualizes systems as open entities entailing a perception that their organizations are effected by direct input and output mechanisms between the system and its environment, in the form of feedback loops. Finally, within its theoretical conceptualization, autopoiesis provides a theory of metaobservation with important implications to research in all domains.

1.3 Nature of the Present Study

In the present study, the organizational nature of a small group will be investigated and described from an outer phenomenological perspective as characterized by statements about a group derived from a domain of observation and an inner phenomenological perspective as characterized by the small group's autopoietic organization. Greater stress will

be given to the latter perspective in keeping with the on-going exchange of ideas about the nature of human social systems (Maturana & Varela, 1975; Beer, 1975; Zeleny, 1979; Jantsch, 1980 and others). There is some disagreement between the two co-constructors of autopoietic theory whether human social systems are sufficiently characterized as self organizing entities or whether there are rules outside of the autopoietic domain which influence the organizing characteristics of human social systems. In the context of the study, the focal group will be investigated to determine in what ways it meets the criteria of autopoiesis. In addition, intuitive statements about other human systems will be made.

The small group chosen was a therapy team that have been meeting regularly on a weekly basis for over two years. It is a naturalistic study that takes place within the context of the system's regular activities. The debrief session is the unit of observation and the verbal interactions among the interacting members is the unit of analysis.

2. LITERATURE REVIEW

2.1 Introduction

As stated, a tremendous amount of literature has been generated in the study of small groups (Schichor, 1970; Pentony, 1970; Hare, 1973; Runcie, 1973). To present, an overview of all small group research is a task which is beyond the range of the study. In the following sections, a number of the more central conceptualizations of small groups will be reviewed. Included will be presentations of non system approaches (sociometric approach, social exchange theory and Bales Interactional Model) and an examination of GST as an open system's approach. This will be followed by a review of autopoiesis, the major concepts and characteristics of autopoiesis and its relevance as an alternate system's approach for looking at human systems. As an introduction to small group research, a number of definitions of small groups will be offered.

2.2 Small Group Definitions

Runcie (1973) reviews a number of group definitions offered by other investigators. Included are:

1. A small group "refers to any collection of persons who are bound together by a distinctive set of social relations" (Broom & Selznick, 1968).
2. "A group is a plurality of individuals who are in contact with one another, who take one another into account and who are aware of some commonality" (Olmstead, 1959).
3. A group is "a number of persons who communicate over a span of time and who are few enough so that each person is able to communicate with all the others, not at

second-hand, through other people but face-to-face" (Homans, 1956).

4. "To the extent that these three criteria-enduring and morally established forms of social interaction, self definition as a member and the same definition by others are fully met, those involved in the sustained interaction are clearly identifiable as composing groups" (Merton, 1957).

The above definitions seem to refer to different aspects of "groupness" which reflects the "smorgasbord" of definitions one finds in the area. Fisher (1974) classified small group definitions according to three categories. The first class of definitions he recognized were those "which stipulates the sharing of a common motivation or goal or fate". A second class of definitions "looks to the structure of the group -- the relationships and ties among group members which bond them together into a group". Variables considered within the context of this class of definitions include group norms, values, power relations, climate...as properties which govern the behavior of group members and tie them to the group. A third category of definitions "perceives the central element of a group to be interaction among its members so that the members are interdependent among themselves" (Ibid., p. 17). Members are seen as mutually influencing each other within the group.

As Fisher notes, none of the small group definitions are "false and incorrect....Each definition is true and correct" (Ibid., p.22). It is simply a matter of looking at different aspects of the same entity. He continues:

It is a matter of fact that the observation of reality must always precede from the perspective of the observer. And perception is always fragmentary.

Remember the fairy tale about the blind men who encountered their first elephant. One blind man felt the legs and perceived the animal to be like a tree trunk. Another perceived only the body of the elephant and assumed it to be like a brick wall. The man who felt the ears thought it was like a fan. Observation of the tail and trunk resulted in conclusions of a rope and snake. The point is that none of the blind men were incorrect. Each perceived the same phenomenon from a different perspective and generalized about the whole phenomenon on the basis of his perceived information. (Ibid., p. 27).

Fisher confirms that small group research has been generated from a wide variety of approaches and orientations, each orientation characterized by its stress on different aspects. In the following section, a number of major perspectives in small group research will be reviewed.

2.3 Approaches in Small Group Research -- Nonsystem Models

2.3.1 Sociometric Approach

The sociometric approach focuses on the interpersonal relationships between group members. The main premise of this approach is that groups which are composed of individuals who are favorably disposed toward each other and who can communicate effectively with one another are more likely to be more productive than those groups composed of members who are hostile or neutral to each other. The approach (cited by Nixon II, 1979) was constructed by Moreno *et al.* in 1934 and aimed at restructuring groups to reflect more accurately the feelings of members towards each other.

A central measurement tool is the sociometric questionnaire. Group members are asked to report their

feelings about each other. The responses are then analyzed and may be presented visually on a sociogram where the patterning of expressed sentiment in group relations is displayed visually.

Nixon II (1979) points out that sociograms can represent a number of group interpersonal characteristics as subgroup cliques, sociometric "stars and social isolates". Philips (1977) refers to a number of limitations of the sociogram. He questions the use of a questionnaire as a useful means for acquiring sociometric information indicating that the relations between members would be more accurately reflected through direct observation. He points out that interpersonal feelings are changing constantly and he wonders whether interpersonal hostility or neutrality can be classified as being constructive or destructive to a group.

2.3.2 Social Exchange Approaches

Social exchange theorists focus on the level of individual behavior in the group context. Individual behavior is perceived as attempts to maximize one's own self interest in a group in terms of pursuing rewarding experiences and avoiding painful ones. Group behavior is analysed within the frame of adjustments individuals make in dealing with the problems of sustained interaction and social interdependence. Two of the more well known theorists in this group are Thibeault & Kelly and Homan.

2.3.3 Thibeault and Kelly's Model

The crux of this approach (cited in Rosenfeld, 1973) conceptualizes group members as constantly evaluating the acceptability of interactions in the group with respect to cost and reward against a criteria which they call Comparative Level (CL). The CL is the standard which members use to evaluate the attractiveness of the relationships in the group. The standard used to determine whether or not to remain in a group is called CL alternative. So a member's CL may fall below his standard but he will remain in the group because the CL alternative is worse -- "There is nothing better out there".

Well functioning groups are perceived as those where individuals can produce highly rewarding behavior to other members at low cost to themselves. Problems exist when group members make the costs of interpersonal actions higher than the rewards. A key factor in escalating costs are interfering variables that exist when interacting behaviors occur, "Interference increases the costs of performing the behavior and usually decreases the reward value of it" (Ibid., p. 19).

Kelly and Thibeault recognize an intimate relationship between the group task and the interpersonal relationships among members. The degree to which they must co-ordinate themselves and are interdependent affects each member's costs and rewards. Both group task and group maintenance functions are seen as important in insuring a member's

desire to remain in the group.

To summarize, groups are perceived as consisting of members who try to maximize their own gains within the context of their interactions. The way in which group members interact, in performing their task in light of each person's criteria for being satisfied in the group (CL) and wanting to remain in the group, is seen as providing a picture of complete group functioning.

2.3.4 Homan's Model

Homan's model is similar in many ways to Thibault and Kelly. An individual's involvement in a group is a function of what costs or rewards he will get out of it. Homans will pursue profit over cost. Interactions will be more attractive for people in it and more likely to re-occur if it is mutually rewarding. Homan perceives individual behavior as stabilizing around the point where he considers himself to be doing the best he can under the circumstances. Greatest behavior change will occur in a low profit situation.

Homan suggests that a group consists of four elements of social behavior. They are: (1) *Activity* - Things done with non humans; (2) *Interaction* - People doing things together; (3) *Sentiment* - Feelings group members have toward others and events; and (4) *Norms* - Rules for proper conduct which people are expected to accept and follow. The elements are seen as being interconnected and mutually effecting. For

example, if a person is unhappy with the group's goals, it will effect his relationship with the group members.

Homan conceptualized two terms which are widely used. Status inconsistency refers to a member's standing or rank on status characteristics of a group as being different than that determined by the group. A black executive sitting on the board of directors of an all white company is an example of status inconsistency. Distributive injustice refers to a perception of group members that the distribution of profits is unjust when they feel their contribution is greater in comparison to other's who may be getting the same amount or more. Nixon II (1979) cites a study where Homan used this notion to explain the tension in the relations among clerical workers in the office he studied (pp. 34-35).

In summary, Homan, like Thibeault & Kelly, conceptualized effective groups as a framework where the interactions are mutually rewarding for its members while the costs are minimized. Individual behavior in a group will preserve itself at a point where the individual sees oneself doing the best one can under the circumstances. The greatest behavioral change will occur in situations where the profits are low. Two widely used notions constructed by Homans are Status Inconsistency and Distributive injustice.

2.3.5 A Comment on the Social Exchange Models

As in many of the traditional small group theories, group behavior is viewed from an individual perspective. The

concepts of rewards and costs are generated from the same general propositions used by B. F. Skinner (cited by Nixon II, 1979) in describing human and animal behavior. Organisms will generally repeat those experiences which are rewarding and avoid those which are not. Homans argues that change or lack of change is a function of people perceiving themselves to "be better off doing something else or that they are doing well enough already" under the circumstances (Ibid., p. 32).

As an individual perspective, Homan (cited by Nixon II, 1979) claims that "nothing emerges (in small groups) that cannot be explained by propositions about the individuals as individuals together with the given condition they happen to be interacting" (p. 33). The picture he paints is that of a small group consisting of a conglomerate of individuals and of the small group equalling the sum of those individuals.

At the same time Homan recognized groups as having systemic properties in the form of the connectivity among the elements that define it as a group. "Any change in one of the elements (activities, interaction, sentiments or norms) would produce a change in the others to restore (its) equilibrium" (Ibid., p. 44). Homans argued that "the maintenance of a given pattern of interrelations among the basic elements of a social system was a relatively temporary condition, whereas system change and the establishment of new equilibria were normal occurrences" (Ibid., p. 44). A systems approach is used to talk about the elements that

define the group as a social system while an individual perspective is used to explain the behavior of the individual within the group. The elements are conceptualized as being part of the system independent of the system members. They are qualities that are perceived as existing within the group. It is somewhat unclear how activities, norms, sentiments and interactions are given an existence outside of the relations among individuals through which they are manifested. How does a "norm" produce a change in a "sentiment" or how does an "activity" produce a change in a "norm"?

2.3.6 The Interactional Perspective -- Bales Model

2.3.6.1 Introduction

One of the more formidable investigators of small groups is Robert F. Bales. Some of his more important writings include *Interaction Process Analysis: A Method for the Study of Small Groups* (1950), *Personality and Interpersonal Behavior* (1973) and *SYMLOG: A Systematic Multi-Level Observation of Groups* (1979). Bales is as well known for the measurement tools he constructed as for his theoretical perspective.

2.3.6.2 The Perspective

Bales has always been concerned with the nature of an individual's group role. He asks:

Is his group role determined by the behavior and evaluation of other group members or mainly by

the special features of the individual personality? (1973, p. 16).

Bales postulated that groups function much along the same dimensional lines as individuals. His interest lay in the group processes realized through a conglomeration of each individual's actions. He perceived a social interaction field as being composed of "all the individual perceptual fields that make up that context and overt behavior by which individuals attempt to communicate the context of their perceptual fields to each other" (1979, p. 31).

A central premise in his approach is that the small group exists in a state of "dynamic equilibrium" with respect to its functions.

The social system in its organization, we postulate, tends to swing or falter indeterminably back and forth between those two theoretical poles; optimum adaptation to the outer situation at a cost of internal malintegration or optimum internal integration at the cost of maladaptation to the outer situation. (Cited in Nixon II, 1973, p. 43).

Group activities swing back and forth between its task aims and its group maintenance needs. Bales conceptualizes the two functions as mutually exclusive with one taking place at the expense of the other. Bales suggested three phases which characterized group functioning, each identifiable by a particular problem area that needed resolution. The three phases are:

1. Orientation -- Members need to arrive at a common definition of the situation that must be solved through

their interactions.

2. Evaluation -- Group establishes the values that will guide it including group norms and standards which are prerequisites for productive group interaction.
3. Control Phase -- It is in this stage that status hierarchies are developed. Members try to influence each other and without status hierarchies conflict would dominate the session and interfere with the tasks.

Within each phase, the dynamic equilibrium shifts between the external task (i.e., problem-solving) and internal actions (i.e., monitoring group cohesiveness).

Important group structural components identified by Bales include (1) control over resources; (2) control over other members; (3) group solidarity and (4) status hierarchy.

2.3.6.3 Research Methods

As stated, Bales is well known for the methods he developed to study group processes. He is most famous for the construction of IPA (interactional process analysis) which is a system of classification of individual acts of a single person. Each act is classified under four broad categories composed of twelve specific classifications. The four categories reflected two areas of behavior: (1) a socio-emotional area and (2) a task area.

In his latest writings (Bales, 1979) he presents a complex methodology for observing group functioning.

This methodology is known as "Systematic Multi-Level Observation of Groups" (or SYMLOG). The unit of analysis is still the individual act and it is described by observers at three different levels: (1) Behavioral Level -- what the actor did; (2) Content Image Level -- What the actor said and toward what image level it was directed -- oneself, the group, other, society; (3) Value Judgement Level -- the actor's value judgement of the action. Not all of the member's acts are rated but only those which the observer deems as significant. The aggregation of observations for each individual is then transformed into an average reflecting each person's perceptual field and visually mapped on to a "field diagram", which consists of three dimensions. The dimensions are (1) Dominance-Submissiveness, (2) Task Orientated - Social Emotional Orientated and (3) Friendly-Unfriendly. Each person occupies a position on the map.

SYMLOG is a complicated tool and would involve a fair amount of training before one could use it.

Through repeated observations of a group, Bales stresses that SYMLOG is capable of keeping in perspective a number of different levels of analysis including the individual's perceptual field, the process of interaction between individuals over time and the dynamic changes over time of the social interaction field.

In summary, Bales places emphasis on group processes flowing along the same lines as individual dimensions and via this perspective he concentrates on group interactions. He perceives groups as moving through three distinctive phases during their interactions. The degree which group members focus on their internal group maintenance function or external task function varies within each phase and between phases.

2.3.6.4 A Comment

Bales constructed a number of non-empirical theoretical constructs which seem to be of heuristic value in the study of small groups. One of his major conceptualizations is the concept of a "focal image" and its role in the actual interaction between group members (Bales, 1979). A focal image is "the focusing of attention of some number of members on one set of words or some physical object or event which the members are co-oriented" (Ibid., p. 32). A focal image is perceived as having a unifying or polarizing effect on the group in the sense that the group members' perceptions move closer together or farther apart with respect to their attitudes toward a "focal image". An interactional pattern collapses once the focal image "ceases to exert unifying or polarizing influences on each other" (Ibid., p. 34). Another image may come into being which commands the attention of individuals resulting in another

pattern being formed or the group may discontinue interaction. Conversely, the old "image" may still be retained in an individual perceptual field to be reintroduced into the interactional context at a later date.

A social interaction pattern is maintained by attention. The degree that a "focal image" develops into a unifying or polarizing effect within the interactional context depends on group members continuing to focus on that "focal image". Bales maintains that "social interactional fields are inherently unstable and transient because of that feature. Life spans of an interactional pattern will differ as determined by the duration of focus on an "image". The conceptualization also seems to implicitly recognize that any spatio-temporal context of group interactions will vary with respect to the different quantity of content issues that are introduced, varying structural manifestations of a group, and a generally dynamic frame.

The concept of "focal image" appears to act as a unifying construct between the individual and interactional aspects of small groups. Although he theoretically conceives of an interactional field to be composed of "all the individual perceptual fields and all the images in the perceptual field", Bales admits that the interactional field" includes more than can be observed or communicated even through exhaustive

discussions and ratings" (Ibid., p. 32). The "focal image" serves as that construct around which group members interact in a social interactional field. The "focal image" is a hypothetical construct that acts as if it has created the interactional activity whose duration and redundancy is determined by that "focal image" continuing to act as a source of attention between team members.

Bales makes clear that the concept of "image" is not directly accessible to observation but is useful as a theoretical construct. He states:

Of course we assume there are differences in the way different members view whatever is at the focus of their attention and the observer probably has a different view too. The question then raised is....as to whether an observer can ever assume the same to say that there is an image, a single image at the centre of attention of each member. Still the observer can detect many signs of a common focus of attention and the observer simply calls it "an image" for heuristic reasons and then asks what different "images" different individuals have of that image or focus. (Ibid., p. 32).

The above is related to another important contribution of Bales which evolves around some of his explicit statements about the nature of small group research. He stresses the rather tentative nature of one's descriptions of interactional patterns, the tentativeness due to the description belonging to a pattern that belongs to the past. He states:

Any field pattern represented on the field is a selection and an abstraction of behavior that has already occurred. The behavior may not continue. In fact...any actual field pattern we

see portrayed on the field diagram has long collapsed.... (Ibid., p. 36).

He continues:

To a certain extent we deal with this problem just by waiting long enough so that we have what seems like a lot of information and feel that we're now getting repetitious information. We wait until things have "settled down" in other words. (Ibid., p. 36).

He contributes the difficulties of small group study centering around (1) the group's openness to environmental influences and (2) their extreme internal complication.

The openness...of each group to the environment along with their tendencies to evolve, mean that information about them tends to become rapidly outdated, and new information must constantly be gathered. The process of change in the...group must be monitored or tracked by the constant gathering of new information. (1973, p. 27).

In summary, although Bales perceives small groups as being within the same dimensional context as individual personalities and interactional fields composed of all the individual perceptual fields, he does admit that the totality can never be communicated since it includes more than can ever be discussed. He recognizes the dynamic nature of group interaction and many different ways interactions can be patterned in conjunction with the concept of "focal image". He also makes important statements about the tentative nature of small group research and the observer's role.

In the next section, a vastly different approach to small group research will be reviewed.

2.4 General Systems Theory

2.4.1 Introduction

Within a systems perspective, it is the relations among group members which are the focus of attention. Human systems are conceptualized as interactional systems and it is the nature of their interactions which are the focus of research within the GST model.

General Systems Theory (GST) was originally constructed within the context of other disciplines for describing biological, engineering and other non-social systems. It was noted that systems across many disciplines seemed to have many common features and so GST was constructed as a way of structuring "the similarities into formal isomorphies" (Watzlawick et al., 1967). Important ideas were imported from Cybernetic and Communicational Theory. In the realm of human social systems, a major "chunk" of systems research has been generated in the context of family research.

2.4.2 Human Systems Defined as a Social System

Olsen (cited in Nixon II, 1979) defined a social system as being a social organization having "a distinctive total unity beyond its component parts, that is distinguished from its environment by a clearly defined boundary and whose subunits are at least partially interrelated within relatively stable patterns of social order" (p. 36). Olsen captures the central characteristics of a system in the

above definition. A system is not simply a conglomerate of parts but demonstrates wholeness in its functioning. Each component is perceived as influencing and being influenced by other components. A change in one system component will bring about changes in all the components.

A related property of systems is the idea of "nonsummativity" (Watzlewick *et al*, 1967). A system is more than the sum of its parts. Its complexity cannot be captured by breaking it down into parts. The nature of the group emerges from the interaction of its group members. Watzlawick *et al*. (1967) refers to an analogy from the domain of chemistry where chemical elements are combined which produce a variety of new, more complex substances. He stresses that the elements considered separately could never account for the complexity of the emerged substance.

A third characteristic referred to in Olson's definition is that the system has a clearly definable boundary that separates it from its environment. The concept of behavior taking place within a boundary or "context" is fundamental for grasping the meaning of the behavior. Leibowitz (1976) wrote:

The meaning of any behavioral act, verbal or nonverbal, is a function of the context within which it occurs. It is the configuraion of behaviors of interactants within a context (either little or much) that must be considered in order to appreciate the significance of any bit of behavior.

He continues and notes that the specifity of behavioral detail noted, spatial extent, and temporal length of the context determine the degree of meaning attained. Context

limitations must be drawn around behavioral actions since "the meaning of any act of behavior can't be exhausted, either theoretically or practically" (1976, p. 450).

A fourth characteristic of systems is that relations among components tend to become stabilized with each communication. Watzlawick et al. (1967) notes that in a communication sequence, every exchange of messages narrows down the number of possible next moves. The interactions tend to repeat themselves and become patterned. Through repeated observations, an observer would be able to formulate rules that seem to govern the relationship among components. Jackson conceptualized family systems as being "rule-governed systems" as a result of the redundant nature of their interactions. (Intuitively it seems likely that many kinds of on-going human interactional systems would demonstrate the characteristics of a rule-governed system).

A fifth characteristic of systems adapted from cybernetic theory is the conceptualization of human systems as open systems. Open systems are those systems that exchange matter, energy or information freely with their environments. A system is characterized as having feedback loops which carry information amongst the system components and between the system and its environment through input and output mechanisms. Some of the feedback loops serve to maintain the system within a stable range and are called negative feedback loops. Conversely, positive feedback loops try to change the system so that a new range of behavior

evolves among the members.

2.4.3 Human Interactional Systems as Steady State Systems

Within the model of GST, human interactional systems are characterized as "steady-state" systems that function to maintain behavior in a stable range. The system is "error activated" in that "the difference between some present state and some preferred state activates the corrective response" (Bateson, 1972, p. 381). Change processes that threaten the integrity of the system are counteracted by counterchange processes that 'move' the system back towards a state of homeostasis or stability. For example, in the realm of family interactional research, it has been demonstrated that attempts by siblings who manifest psychiatric 'symptoms' to get 'well' are counteracted by the behavior of other family members. Although the intention of the family members is to 'help' the 'sick' member, from a relation perspective the 'helping' behavior may have a totally opposite effect. The 'helping' behavior serves to maintain the 'symptomatic' behavior thus preserving the family dynamics within its habitual range.

2.4.4 Equifinality

The concept of 'equifinality' notes that how a system may appear in a later temporal-spatial frame is independent of the system's initial conditions. The system can undergo tremendous modifications and changes within the limitations

of its boundaries in the process of maintaining its identity as a system. Although human interactional systems are viewed as homeostatic systems, the notion of 'equifinality' recognizes the dynamic nature of systemic existence.

2.4.5 Small Group Research Within a System's Model

A large chunk of small group research within a system's model has been within the frame of family systems (Riskin & Faunce, 1970; Riskin, 1976, 1982; Harper, 1977; Riskin & Jackson, 1968, Mishler & Waxler, 1966; Jones, 1977; Wynne & Singer, 1963; Reiss, 1971; Hansen, 1973; Sterk, 1981; Zeigler and Musliner, 1972). Much of systems research in the family area have used families of a clinical nature as its subjects (Wynne & Singer, 1963; Mishler & Waxler, 1966; Friedmand & Friedman, 1970; Riskin & Faunce, 1970, 1972;....Bateson, Jackson, Haley and Weakland, 1953; Doane, 1981; Clarke, 1981). The unit of observation is often some kind of task given to the family to carry out together. The interactions among family members are observed and often taped. The units of interactions are then rated by observers and judges along different scale-dimensions. Often cited in the research is Singer and Wynne's scoring system for measuring transactional deviance. Friedman and Friedman (1970) in their study comparing family interaction patterns amongst families with a schizophrenic offspring and families without, rated the family as a unit along the dimensions of conflict failure and confusion. One of the most prolific

investigators in the family area has been Jules Riskin. Riskin, together with Faunce (1970, 1977) developed the "Family Interaction Scale" (FIS) for measuring whole family interaction. Initially, the unit of analysis used was the speech. All speeches were scored among six scale dimensions which included: (1) clarity level, (2) topic continuity, (3) commitment scale, (4) agreement scale, (5) intensity scale and (6) relationship scale. Data were gathered from a semi-structured interview involving the whole family. They were usually asked to "plan an outing" or some other task. The sessions were audiorecorded as well as observed from behind a one-way mirror. Tapes were transcribed and speeches were assigned a place on the scale dimensions. In these earlier studies, Riskin's focus was on clinical families. Recently, Riskin (1976, 1982) has been involved in a longitudinal study of "normal" families. He revised FIS to be used as a macro tool in rating families when the object was an "overall impression" of a family's interactional pattern, as opposed to a rating of each speech. The scoring sheet includes seventeen scale-dimensions and five possibilities for each scale. A unique aspect of this project is that at the end of each session with the family, observers hold clinical discussions about the family along

 'An unfortunate side effect of a distinction of families as "normal" or "clinical" is that it leads to a dualistic conceptualization of the living world in which one side of a duality is usually culturally perceived as being positive and the other side as negative. Varela (1978), Keeney (1983) and others view all distinctions of this kind as complementaries and as related.

the following lines: (1) What interactional patterns are observed? (2) What rules seem to govern the family interactions? (3) Do any patterns seem particularly healthy? (4) How might the present interaction affect the family members in the future? The summaries are then used to write initial clinical summaries of the interviews and as a source for generating hypotheses.

Riskin and Faunce (1972), in a comprehensive review of family interactional research noted that the most utilized scales in family research were: (1) interruptions and intrusions; (2) who-talks-when-in the family communication network; (3) fragmentation-unclarity-incongruency, especially popular categories in the research of clinical families; (4) agreement-disagreement; (5) humor-laughter as indicators of tension and family health and (6) acknowledgement-commitment-responsiveness.

Family systems tend to be treated uniquely within the context of small group research. Huston (1982)² compares the nuclear family relationships to other kinds of relationships in the following manner:

Family relationships -- husband, wife, parent and child are likely to be more enduring, involve more frequent interaction, span a greater range of activities and subject to a larger set of cultural norms than most other relationships.... (p. 903).

Montgomery (1982) notes that the family has a special

²In his operation of distinction, Huston's description of an 'ideal' frame of nuclear family relationships is from his point of vantage and not a typical style of relationship which he seems to be indicating. Intuitively I would suggest that families self-organize in infiinitely different ways which is context dependent.

function insofar as it is set up to meet its members emotional needs. Jackson notes that families are rule-governed systems.

One can list many kinds of small groups that are enduring, in which members interact often, that span a fair amount of activities, whose interactions are rule-governed and where emotional needs are partially met. Some examples are friendships, some professional relationships, recreation groups, interest groups, sports teams and many more. Although a family may or may not realize "more" of each characteristic, all on-going interactional systems are defined by the same properties, and as such meet the criteria of "systemness". An implication would be that the same measurement tools developed within the context of family research would be applicable to studying other small groups as long as they met the criteria of "systemness". Conversely tools developed within the realm of other kinds of small groups could be applicable to studying families. Minard's (1967) study of the interactional dynamics in a day care centre is one example of an application of GST to non-family systems.

2.4.6 Summary of Systems Model

The systems model deviates substantially from the more traditional approaches of small group research insofar as the unit of observation is members-interacting-with-other-members. The focus of system

theorists is in observing and describing the relations among group members by focusing on their interactive behavior. GST theorists reject perspectives that approach small group behavior from an individual perspective. Watzlawick et al. (1967) notes the differences in perspective in a very succinct manner:

When interaction is considered a derivative of individual "properties" such as roles, values, expectations and motivations, the composite -- two or more interacting individuals -- is a summative heap that can be broken into more basic (individual) units. In contrast from the first axiom of communication -- that all behavior is communication and one cannot not communicate -- it follows that communication sequences would be reciprocally inseparable in short, that interaction is nonsummativity. (p. 126).

Within the systems perspective, a whole of human interaction does not equal the whole of all the "individuals perceptual fields" that compose it but rather is something beyond that. The relationships emerge through the interactions of the members.

A common criticism of GST (Buckley (cited in Nixon II, 1979), Jantsch, 1981; Wall, 1982) is that it tends to emphasize human systems as being morphostatic in nature (maintaining stable structures) as opposed to being morphogenetic (undergoing continual structural changes). Nixon II (1979) quotes Buckley who states:

In dealing with the sociocultural system...we jump to a new system level and need yet a new term to express not only the structural -- maintaining feature, but also the structure as an elaborating and changing feature of the inherently unstable system i.e., a concept of morphogenesis. (p. 39).

Jantsch (1980) points out that the conceptualization of

system structures as being mainly stable is a useful perception in the domain of technology, for the structure of a machine determines to a large extent the processes it can accomodate. He stresses that in human systems though it is the "interplay between processes" that are important, the system is better characterized as a dynamic system. He states:

...a system now appears as a set of coherent evolving interactive processes which temporarily manifest itself in globally stable structures that have nothing to do with the equilibrium and the solidity of technological structures... (p. 6).

Within this conceptualization, the structures are continuously in a state of change. There is nothing solid about a system but rather the system is perceived as a process structure.

A second criticism is that the GST made the role of the individual in its investigation nearly non-existent. Wall (1982) notes that the individuals are subordinated to the processes of the larger system. Systems are perceived as being "real entities", wholes in themselves. Wall (1982) continues:

It is a social doctrine which calls for increasing unification of social phenomena. All elements are to be drawn into the system and the goals of the system are those of the elements. (p. 53).

He concludes that this leads to a view of social organizations as being basically conservative in nature.

A third criticism, also offered by Wall (1982) is that although GST talks about systems in interactional terms, GST does not come to grips with the role the observer plays as

the "developer and applier of the categories which he is interested in" (Ibid., p. 58).

Although the purpose of the study is not to defend GST, it appears that a number of the criticisms are only partially valid.

With respect to the first criticism of human systems being perceived as consisting of mainly stable structures, one must also note the central role of "equifinality" in GST. As noted in section 2.4.4, it is recognized that systems may undergo tremendous changes within the constraints of the systems' boundaries where later conditions are independent of initial conditions. Human systems are recognized as being dynamic to some degree.

With respect to the secondary role the individual plays in the theory, although a valid criticism, one should note that the model was developed at a time when reductionist paradigms "ruled the roost" in social research. As an alternate approach to traditional scientific models, it was desirable that GST would occupy a position at the other extreme end. Still one can recognize aspects of interactional approaches that take the individual into account. One of the major concepts is the role of "punctuation" in interactional behavior. Watzlawick et al. (1967) points out that humans share many conventions of punctuation but that individuals still hold vastly different views of the same event. Problems in communication may arise if the views are vastly different and the individuals are

unable to metacommunicate about them. The concept of punctuation derives from an individual perception of an event.

With respect to GST not coming to grips with the role an observer plays in research, this seems to be a partially inaccurate perception. Investigators within the GST model explicate the role of the observer in constructing the reality they are exploring. Riskin and Faunce (1972) wrote:

One's belief about the relation between the individual and the family and what the boundaries of the individual are will tend to influence one's methods as well as one's variables. For example, does the researcher conceptualize the family (small group) as the primary unit or the individual as the primary unit or both as primary units? And if both, how does he conceptualize the relationship between the two units. (p. 395).

Riskin explicitly recognized that one's belief system influences how one approaches his or her research. In addition, he (Riskin, 1976, 1982) recognized that the very act of observation of a human social system will change³ that social system in some manner. It is an issue which he cites as an ethical dilemma in his research of "normal" families.

GST theorists recognize the role of an observer in his or her observations but do not go as far as formalizing the investigator's role in a theory of metaobservation.

³"Wiener (cited by Keeney, 1983) was aware of different orders of feedback process. He realized that in the Human Sciences higher order cybernetic process necessarily includes the observer. Thus he proposed that any community studied by an anthropologist will "never be quite the same afterward'." (p. 77).

2.4.7 A Comment on System and Nonsystemic Perspectives in Small Group Research

There are notable differences as to how investigators using nonsystemic⁴ approaches punctuate the nature of small group behavior between members in comparison to investigators who conceptualize small group behavior in a GST perspective. Most notably, the nonsystemic approaches focus on the individuals' group behavior whereas GST focuses on the interactional behavior amongst system members in a context. "Dormitive" kinds of description are popular in nonsystemic approaches which "entails a more abstract repackaging" (Keeney, 1973, p. 33) of the phenomena the theory is attempting to explain. An example of a dormitive description are the four elements that define a conglomerate of individuals as a group in Homan's Social Exchange Theory.

There is, however, an area of commonality between GST and the nonsystemic theories. Both paradigms are incomplete and insufficient for totally capturing the characteristics of small groups and other human social systems. Metaphorically traditional nonsystemic approaches attempt to realize a 'painting without a painter' under the guise of 'objectivity'. The role of the researcher is to carry out one's research in a frame of objectivity. The end result is the elimination of the investigator as a factor in his or her investigations culminating in a reification of the

⁴The nonsystemic approaches cited in the study were the sociometric approach, social exchange theorists and Bales interaction model.

findings as scientific truth.

The GST approach in contrast appears to be lacking in two fundamental areas. Although recognizing an observer-observed interactional effect GST does not go as far as presenting an explicit theory of metaresearch. In addition, the descriptions utilized for describing a system's organization are perceived as sufficient for describing the organizational properties of small groups and other human social systems.

In the following section an alternate systems approach will be examined. In contrast to the nonsystemic perspectives, the role of the investigator is explicated as an active participant and constructor of the domain of investigation. In contrast to GST, human social systems are perceived as being organizationally closed. How the system realizes itself as a unity belongs to a different domain than descriptive statements made about the system. The alternate systems approach is known as autopoietic theory.

2.5 The Theory of Autopoietic Systems

2.5.1 Introduction

A theoretical framework for conceptualizing living systems as being autopoietic was developed within the area of biological research by Varela and Maturano (1975). There is some disagreement between the two central theorists of this model as to whether the concepts are useful within the

realm of human social systems. Different viewpoints will be presented in later sections, in addition to the author's attempts to apply some of the concepts in the present study. In this section, some of the major concepts of autopoiesis will be examined including its conceptualizations of a metatheory of observation.

2.5.2 Definition of Autopoiesis

Jantsch (1980) defines autopoiesis in the following manner:

Autopoiesis refers to the characteristic of living systems to continuously renew themselves and to regulate this process in such a way that the integrity of their structure is maintained. (p. 2).

Maturana and Varela (1975) provide the following description of the nature of autopoietic systems. An autopoietic system "specifies and generates its own organization through its operations as a system of production of its own components" (p. 4). All changes are subordinated "to the maintenance of its organization independently of how profoundly they may otherwise be transformed".

Two of the central characteristics that are specified in these definitions is that autopoietic systems are self-organizing and self-renewing. It is their own processes which generate and specify the unities' characteristics as a system. It is therefore closed from an organizational point of view. Change is generated and defined from within. The second characteristic is that it exists only within the

realm of structural relations. It is the process of producing the components that "constitute it as a concrete unity in the space in which it exists by specifying the topological domain of its realization in such a network" (Ibid., p.4). It is the interactions of its components that constitute its existence as a system.

The processes of the interacting components are also conceptualized as specifying the system's properties and generating the unique patterns that specify its organization. The major characteristic of autopoiesis appears to be its holistic nature. Its physical nature, boundary, properties and patterns of processes are all characterized by its autopoietic nature.

2.5.3 Unique Features of Autopoietic Systems

Maturana and Varela (1975) identified four characteristics that autopoietic systems manifest as a result of their holistic nature. These characteristics are:

1. Individuality -- The autopoietic system as a self-determinant of its own organization maintains its own unique identity.
2. Unity -- It is the nature of its own autopoietic processes that specifies it as a unity. Its operations specify its boundaries, properties and relations with its environment in the process of its operations.
3. Autonomy -- Autopoietic systems are autonomous since all changes are "subordinate to the maintenance of their own organization" (Ibid., p.6) independently of how great the changes in the system may be.
4. No Inputs or Outputs -- The autopoietic system does not have direct input/output mechanisms connecting it to its environment. Whether or not an independent event from the environment effects the system is determined by the

system's own structure. External events perturb an autopoietic system only to the degree that is specified by the system's own structure.

An important part of their theoretical framework is in distinguishing between a domain of operations of which the notion of autopoiesis is considered to be "necessary and sufficient" to characterize the organization of a living system and a domain of description which is constructed by the observer and used to discuss the organization of living systems. Their ideas constitute a theory of metaobservation which will be reviewed in the following section.

2.5.4 Theory of Metaobservation

Maturana and Varela (1975) stress that the concepts often used to discuss the nature of a living system reflect more the observer's views about how the system is organized than the actual organization of the system. Constructs such as "purposefulness" and "information", are employed by observers in describing living systems. In doing so they provide a frame for a "community of scientists" to talk about systems and say little about how the system actually operates. Varela (1979) wrote:

Purpose or aims, however, are not features of the organization of any machine...those notions belong to the domain of our discourse about our actions, that is, they belong to the domain of communicative descriptions and when applied to...any system independent of us, they reflect our considering the...system in some encompassing context. (p. 14).

Purposes, functions and information are a set of agreed upon constructs that enable an observer community to talk

about the living system within a domain of description but are external to the actual properties of a system's organization, which is specified and generated by its own operations.

2.5.5 Role of the Observer

The observer is given a key role in creating and influencing the description of the phenomena which is the focus for attention. For the observer as a living system is also characterized by an autopoietic organization. This provides a heuristic and formal apologetic for the commonplace realization of the necessary subjective origin of one's research. The researcher is made of the same stuff as that which is being observed or studied. The concepts, ideas, and theories that an observer constructs and uses in one's interactions with the observed tells more about the "knower" than the known. Varela (1979) noted that the subjective origin of knowledge is a reflection of the ontogeny⁵ of the knower. As autopoietic entities in themselves, the cognitive activity of an observer community is necessarily "relative to the particular way in which its autopoiesis is realized" (Ibid., p. 48). Knowledge as "descriptive conduct" is "relative to the cognitive domain of the knower" (Ibid., p. 48) and the continuous ontogenetical changes the knower goes through.

⁵Maturana and Varela (1975) define Ontogeny as "the history of the structural transformations of a unity" (p. 105).

2.5.6 Properties of an Observer System

Varela (1976) notes that observers as "the systems that do descriptions of wholes and systems" are characterized by three main properties:

1. Capacity for Indication -- The observer specifies the boundaries of the system he is investigating and at what levels. He also can specify the criteria for stability and change.
2. Capacity for Time -- The observer chops a slice out for observation at a given time which he determines and starts a sequence whose termination point he also determines.
3. Capacity for Agreement -- An observer can reproduce other observer's studies following their corresponding time patterns or can coordinate his own observations with others'.

2.5.7 Coupling

Observers, characterized as a unity themselves, form into a community of observers in a domain of interaction under the conditions in which, through their interactions with each other, they become behaviorally coupled. Maturana and Varela (1975) describe "behavioral coupling" in the following manner:

In this coupling, the autopoietic conduct of an organism A becomes a source of deformation for an organism B and the compensatory behavior of organism B acts, in turn, as a source of deformation of organism A whose compensatory behavior acts again as a source of deformation of B and so on, recursively until the coupling is interrupted. In this manner, a chain of interlocked interactions develop such that....it is for the other organism, while the chain lasts, a source of compensable deformations which can be described as meaningful in the context of the coupled behavior. (p. 76).

Although the systems mutually modify each other while structurally coupled, Maturana and Varela stress that they do so without loss of unity. Each system in the coupling maintains its own identity. It may change some of its characteristics but the change will not be "so great as to change its identity" (Wall, 1982, p. 79).

2.5.8 Domain of Consensus

While structurally coupled, the coupled systems generate a "domain of consensual behavior" (Maturana & Varela, 1975). The systems are engaged in communicative behavior where they "orient each other with modes of behavior" specified during their mutually modifying interactions. A level of consensus is also a linguistic domain. It is within this domain that an observer from the domain of description will likely perceive one unity as causing the conduct of the other unity. Although useful from a perspective of description, it gives no information about the nature of the unities engaged in interaction. Maturana and Varela state:

Communicative and linguistic interactions are intrinsically not informative; organism A does not and cannot determine the conduct of organism B because due to the nature of the autopoietic organization itself, every change that an organism undergoes is necessarily and unavoidably determined by its own organization. (1975, p. 11).

2.5.9 Two Phenomenological Perspectives

From a domain of description, observers often endow subordinated systems with producing some kind of output within the superordinate system. A system component is perceived by an observer community to be demonstrating purposful behavior within the domain of the "superordinate system". Often overlooked especially in the realm of social systems is that all living systems are characterized by their autopoietic organization. From the domain of autopoiesis, all living systems whether observed as individual entities or within the context of a superordinate system are "self organizing and autonomous". As observers, we tend to focus on one domain of description which can be conceptualized as from the "outside looking in", or an outer phenomenological perspective, and ignore a domain of description which is conceptualized as being from the "inside looking out" or an inner phenomenological perspective. From the outside perspective, it seems as if unities are "allopoietic" in nature which means that a subordinate unity has a purpose to its behavior which is usually describable within the domain of the superordinate unity. From an inner phenomenological perspective, unities are recognized for their autopoietic characteristics specifically self-organization and autonomy. It is observation within a holistic context.

2.5.10 Present Study

From the perspective of the present study, the above views suggest that a more complete systemic analysis would entail descriptions that are derived from within both phenomenological perspectives. At the same time, discussion around the question of whether human social systems can be usefully conceptualized as being intrinsically self-organizing continues. Within the context of the present study, descriptive statements derived from both phenomenological perspectives will be utilized in the analysis of the focal system although somewhat greater emphasis is placed on the inner phenomenological perspective. This is in keeping with the exploratory nature of the study within the context of the on-going discussion about the nature of human social systems.

2.6 Summary: A Comparison of GST and Autopoiesis

An autopoietic conceptualization of human social systems demonstrates many profound differences in comparison to GST. Whereas GST conceptualizes systems as open systems with systemic organization being directly influenced by input-output mechanisms, autopoietic theory conceptualizes systems as being organizationally closed generated by its own interactional processes. Whereas GST perceives structures of systems as having clearly defineable boundaries, autopoiesis perceives systems as existing within a frame of continuously changing "process-structures".

Whereas GST's descriptions of a particular system from a domain of observation are perceived as capturing the organizational nature of the system, autopoietic theory marks a distinction between a domain of description and a domain of autopoiesis as belonging to separate nonintersecting domains. Consequently the very essence of observation is re-examined and formalized into a metaobservational theory.

Autopoietic theory incorporates the investigator as a full fledged research participant. Information is "reinterpreted as codependent or constructive in contradistinction to representational or instructive" (Varela, 1979, p. 15). The "self-referential" origin of observation is clearly recognized and framed as revealing the properties of the describer as opposed to the described.

3. METHOD

3.1 Subjects

The small group that participated in the study was the "Experimental Psychotherapy Centre" (EPC) that meets out of the University of Alberta. The team is composed of seven members and assembles one evening a week to counsel clients utilizing a therapy team format. Two therapy sessions are scheduled each week with debriefing meetings of one half-hour duration scheduled following each therapy session. The team is characterized by the relative permanence of its members most of whom take part in each session. All the members are certified practioners in counselling psychology. Four of the members hold Ph.D.'s while the other three are at an advanced stage in their graduate studies.

3.1.1 Nature of EPC

The Centre was formed in August of 1980 by Dr. Allen VanderWell inspired by his experiences with a therapy team format at the Mental Research Institute at Palo Alto, California. Dr. VanderWell sought to develop a format at the University of Alberta where psychotherapy could be practised within a team setting and within a system's strategic orientation. Four of the original seven members are still with the team. One member joined in August, 1981 while the two newest members joined in September and December, 1982.

The team works with clients with a large variety of referral problems. Referral sources include many different mental health agencies in Edmonton, including social services and therapists in private practise. Often guests are in attendance to observe the sessions, having a professional interest in the client as a social worker or referral source or graduate students in the area of counselling psychology interested in observing a team format and a strategic orientation in action. The physical setting includes a therapy and observation room which are connected by a one-way mirror and a telephone. The part of the team not functioning as interviewers during the session retire to the observational room where they function as observer-participants during the session. Therapy sessions are interrupted at least once per session when the interviewers retire to the observation room to consult with the other team members with respect to strategies and tactics. At other times, observer-participants may phone in perceptions, suggestions or requests to the interviewer(s) in the therapy room or join the interviewer for some specific purpose. Role rotation is practised where members serve different functions in different sessions. Following each session, the team and guests reassemble in the therapy room to debrief the just completed session which may vary from 15 - 45 minutes duration. The reader is directed to Cornwell and Pearson's (1981) and Papp (1980) for a more in depth explication of a team format utilizing a strategic

approach.

3.2 Context of the Study

The research focus was the debrief session following the therapy session. All members present took part including guests. As an exploratory study, the author felt that the observation of EPC within the limited context of its own interactions would provide a framework for noting its organizational properties without the complexities of observation and description involved in the larger team-client context. It is assumed, though, that within any system context, no matter how simple or complex, the same theoretical conceptions could be demonstrated.

Another aspect of the research setting was that it took place in a naturalistic setting. Nothing was altered in the physical or task setting of the group. The investigator remained behind the one-way mirror during the debrief sessions as an attempt to limit even more the influencing factors of an observer over what was being investigated. This was in conjunction with the investigator's aim to carry out the investigation in as naturalistic a manner as possible. As Watzlawick et al. (1967) stated, "A system is its own best explanation" (p. 32) and it was the author's aim to interfere as minimally as possible with the observed. The intrinsic nature of research, however, is such that one cannot fraction out the effects of the observer which are clearly stated in in the theory of metaobservation reviewed

in Chapter 3.

3.3 Method

Verbal data were collected from the debrief sessions by means of audio tape over twelve sessions that spanned a period of three months. All tapes were transcribed verbatim. Very few changes were made to the transcript except where the verbalizations were unclear. Audio taping is a useful instrument for collecting data, especially when verbal interactions form the unit of analysis in a study. In the present study, the organizational characteristics of the small group are focused upon via the interactions among the interacting members as generated through their verbal interactions. It is noted that some information about the team is being lost by not including non-verbal cues. However, Riskin (1964) suggests that audio recorded data is sufficient for carrying out research on systems. He continues:

We believe that significant behavior which occurs in other modalities ie., incongruencies between body movement and vocal behavior, will have correlates between tonal and verbal behavior. (p. 485).⁶

Although segments from many of the twelve sessions are used, descriptive statements formulated about EPC's characteristics as a system are derived from a more in depth

⁶ Riskin's assumption about incongruencies between movement and vocal behavior will have correlates between tonal and verbal behavior intuitively seems to be partially accurate. A better justification would be the impossibility of describing everything that takes place in a context.

look of five debriefing sessions selected by the author. The sessions were from November 26, 1982 (Session I), January 6, 1983 (Session II), January 20, 1983 (Session III), February 6, 1982 (Session IV) February 20, 1983 (Session V and Session VI). It was noted elsewhere (Riskin and Faunce, 1970) that 4 - 5 minutes of verbal interaction was "sufficient data in which to do a meaningful analysis" (p. 509) of a family. In the present study, many hours of data are included from which the descriptive statements emerge. It was felt that longer samples over different temporal-spatial periods would be more useful for obtaining the data of interest to the author.

All names used in the study were coded to guarantee the anonymity of all the participants.

4. RESULTS

4.1 Introduction

4.1.1 The Tentative Nature of Results

The aim of the study was to describe the organizational characteristics of the "Experimental Psychotherapy Centre" from an inner and outer phenomenological perspective. Since the "spatio-temporal" context EPC was studied, it was assumed that it has undergone structural changes that render it somewhat different from that "space-time" in which it was studied. Indeed, it will be demonstrated that the component members are linked in a way that structural changes are constantly occurring. The nature of research is such that it is a system of statements about patterns and processes that occur in the past and may not manifest themselves in the exact same way a second time. With respect to human interactional patterns, redundant and thus observable over different frames of observation by an observer, one can never predict with certainty the duration of an interactional pattern, Bateson (1979) states:

The pattern may be changed or broken by addition, by repetition, by anything that will force to a new perception of it and these changes can never be predicted with absolute certainty because they have not yet happened. (p. 29).

The above lends credence to the position that a "system is its own best explanation" (Watzlawick et al.) to which is added that it is its own best explanation within the

"temporal-spatio" frame that it is observed by an observing system. From an outer phenomenological perspective (domain of description) the implications for studying the focal system is that the descriptive statements can at best approximate the team's organizational characteristics as would be hypothetically observed through its present emergence in team interactions with the range of approximation being from a close approximation to a distant one depending on the degree of changes EPC has gone through since the termination of research.

From an inner phenomenological perspective (domain of autopoietic organization), all descriptive statements about the organizational characteristics of the system are "intrinsically noninformative" (Maturana & Varela, 1975, p. 76) (both in the present and future sense) since the characteristics are perceived as originating from the systems own self-renewing nature. Any statements of prediction of a system's future interactional state from its present one is perceived as being an "artifice of his (the observer's) description" (Ibid., p. 15) and nothing more.

4.2 Unit of Analysis

The units of analysis in the study are the verbal transactions from a complete debriefing session as well as segments taken from the whole. The segment as defined by the author consists of a sequence of speeches which make up the presentation of a single idea, topic, or topic perspective.

It is a unit of analysis that has been applied previously in family studies (Riskin and Faunce, 1972). Speeches are defined as any utterance of any duration by a person bounded by the utterances of other persons. Boundary points between segments were chosen arbitrarily by the investigator where shifts in ideas, topics or perspectives were perceived by the observer as having taken place.

In choosing the segment as a unit of analysis, it is not proposed that a segment has an independent existence within a totality of verbal interactions. The division of a session into segments was created as a means of talking about the nature of the system within a domain of description that will hopefully be of heuristic value to other observers of human social systems. The segment does not exist outside of the interaction between the observer and the system. The segment is simply a context of verbal interaction among team members that is sliced out of the whole and of shorter duration. It is a more convenient and a more manageable slice exemplifying descriptive statements about the team. Both segments and whole sessions will be utilized as units of analysis in the present study.

4.3 Organizational Characteristics of the EPC

4.3.1 Introduction: A Visual Conceptualization of EPC's Organization

Figures I - VII (see Appendix 1) contain a visual conceptualization of EPC's organizational characteristics. Figures I - VI show a visual picture of verbal interaction which take place within sessional segments while figure VII contains a conceptualization of the verbal activity within the session as a whole.

Although presented sequentially, there is no implied link among the segments in terms of cause-effect linkage. Each segment is perceived as an independent manifestation of the system in its totality. Members in interaction are those who are connected by a circular figure drawn around them. Clear dyadic interaction is indicated by a broken circular figure connecting the pairs. In the following sections, a number of statements about the organizational characteristics of the team system will be presented.

4.3.2 EPC Specifies Itself Within a Variety of Interactional Forms

A comparison of the visual conceptualization of the interactional frames both at the segmental and whole session level demonstrates numerous interactional patterns within which the EPC manifests itself. Although some segmental patterns were similar (i.e., Segments 3 and 7 in Session I, and Segments XI and XIII in Session VI), it appeared that one cannot predict the interactional form of a segment. From an inner phenomenological perspective, the segments unfolded in the manner that they unfolded in accordance to self

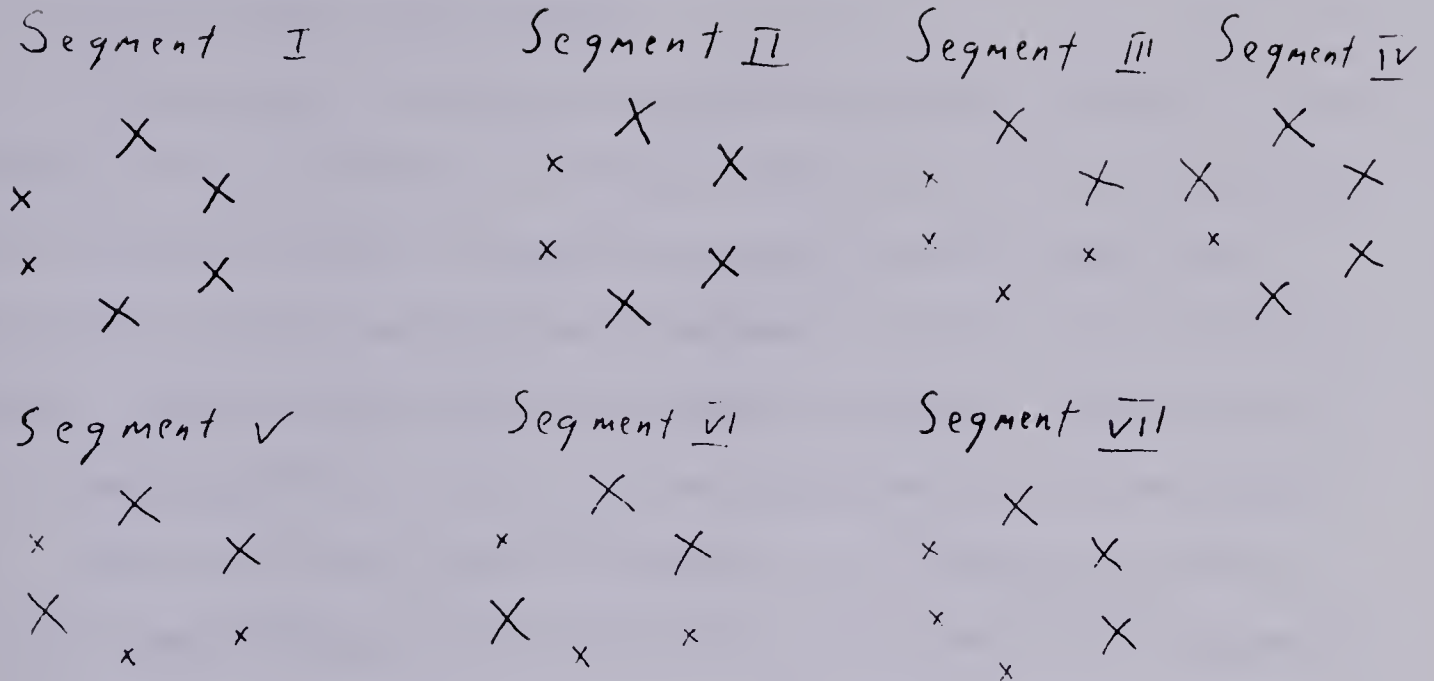
determining properties as specified by the network of verbal interactions among the system members and each member's own autopoietic characteristics. Each segment was its own story and at a more macro level each debriefing session as a whole was its own story.

The unity of each segment or session as specified within numerous interactional forms at a visual level indicated that one of the properties that the team seemed to have was the ability of its structural components (team members) to link together in many different ways without losing its identity as a system. The apparent behavioral plasticity of the system will be examined in the following sections.

4.3.3 Different System Members Are Engaged in Interaction in Different Segments

In comparing between segments, the EPC members engaged in interaction seemed to behave in a way that is metaphoric to individual pulsations in a circuit of random electrical impulses. In one segment, you may have had two members engaged in verbal interaction with each other, while in a preceding segment, you may have had three partially or completely different members "pulsating" in interaction. In a third segment, it may be that all the members partook in verbal interaction. Viewed as individual pulsations in a circuit of impulses, one could present the member's interactions visually in the following manner using Session

I as an example.



The large X's represent the members that are verbally interacting while the rest of the members are verbally quiet.

An alternate way of conceptualizing the interactions of segments and whole sessions and one which is derived from an inner phenomenological perspective would be through a network of overlapping flip cards with each card representing a member's speech and physical location in the group. The ordering of the cards would parallel that of the ordering of the speeches in a segment or a complete session. From that perspective, a holistic conceptualization of the team system would emerge and complement a descriptive analysis of the system's properties derived from a domain of observation and description.

4.3.4 Some System Members Participate in Verbal Interaction More Often than Others

There was a noticeable difference among members in the degree of involvement in verbal interaction as reflected by the average number of speeches made by each member per session and the percentage of segments they participated in which a participant made at least one speech. Tables I and II (see Appendix 1) contain the summaries for these areas.

The two most involved members with respect to their verbal participation are Es and Bo. They made an average of 40.3 and 26.1 speeches per session and both participated in 87.7% of total session segments. The two least involved members Ro and Co who made an average of 13.5 and 7.0 speeches per session and were involved in 51.6% and 31.8% of the interactional segments. The same pattern is also evident with respect to the number of segment initiations each person made (see Table III, Appendix 1). Es and Bo, together with Li, initiated the greatest number of segment shifts while Co and Ro initiated the fewest segment shifts.

The results seemed to indicate a differential level of involvement in the team system among different team members; Es and Bo were highly involved at the verbal level in all sessions and over most segments while Ro and Co appeared to be the least involved verbally overall. Li, Ar and Ca were involved in all sessions although there was a fluctuation among sessions in the number of speeches they gave and the number of segments they participated in.

From a domain of explanation, at least three possibilities are presented in accounting for the level of differential involvement among team members.

1. Some team members participated more actively in segments in which they initiated the idea of that segment. For example, five of Li's six speeches in Session I occurred within the context of segment VI which he initiated. Eight of his twenty speeches in Session II occurred in segment I whose idea he initiated. In Session IV (Part II), twenty-two of Bo's twenty-eight speeches occurred within the two segments she initiated (segments XIV and XVII). In some instances, speakers who were segment initiators were more verbally involved within the context initiated than in other contexts. However, there were members who were verbally very active in many of the segments regardless of whether he or she initiated the segment. For example, Es participated in nearly all the segments. Ro's pattern of participation though not nearly as active as Es also seemed to be independent of her initiating a segment.
2. Team members tended to become more verbally involved when the member perceived oneself as being a central participant in the topic area being discussed. Within the first four sessions, it was usually in the context of the member functioning as the "therapist interviewer" in the proceeding therapy session. From Table I (see Appendix 1), it appears that a member's rank order with

respect to number of relative speeches in those sessions was higher than in other sessions. For example, Bo ranks 1 and 2 in the number of overt communications she made in Sessions I and II representing a higher ranking than in preceding debrief sessions. In both sessions, she was the primary therapist. Likewise, Ar ranked 2 in Session III and Li ranks 3 in Session IV, both above their overall average rank; and in the therapy sessions prior to the debrief session, they functioned as primary therapist. Involvement differentiation may be partially related to centrality of the member in content discussed.

3. Members may differ in the degree that they feel comfortable in using the metatherapy language of the system. For example, Co was one of the newer members during the time of the study, and spoke very infrequently averaging just seven speeches per session. Most speeches were in the form of asking for information, expressing agreement or light hearted banter. Possibly this low level of participation could be attributed to limited experience in utilizing the metatherapy for offering ideas or suggestions.

All three of the above explanations may account for the differential involvement among segments and there may be alternative explanations. Whatever the explanation, it is really secondary to the fact that involvement differentiation does occur which can be indicative of a

subjective determinant of interaction among the interacting members. An inner phenomenological perspective is now turned to in order to examine differential involvement from an alternate epistemological context.

4.3.5 Involvement Differentiation From an Inner Phenomenological Perspective

Segment 5 of Session I was characterized by a fairly long speech by a guest whose content area was the history of the client the team is working with (see Session III in Appendix II). This was immediately followed by a segmental shift initiated by Li around a technical issue. It was almost as if the guest was talking to the wall as none of the system-members engaged her in verbal interaction around the topic she initiated. Indeed, the expression "talking to a wall" makes more sense if one conceives individuals as being organizationally closed when reaction to an event such as a speech, or other external events is internally determined by that individual's internal state at the time.

In this sense, each segment in the study can be perceived as system members engaging in interactive communication through their coupled behavior only to the degree that the idea, topic, or event acted as a source of "perturbance" to individual system members and this was determined by each individual's internal structural state. One finds some segments where all members were engaged in verbal interactions and some segments where only a few

members were engaged in communicative interactions. As autonomous beings it is each system member's self-organizational properties that determined one's engagement in an interactional field and to what degree. Once no one was "moved" by an event and individuals, through their ideas, ceased to be sources of "deformation"⁷ for each other, the behavioral coupling collapsed and verbal interaction ceased, either to start up again anew in another segment or resulting in the temporary or permanent disbandment of the system (i.e., system members leave and never reassemble again).

4.3.6 Life Span of Different Segments as Centering Around a Content Area Vary

The life span of verbal interactions around a content area as defined by the number of speeches which occurred within segment boundaries varied from one speech (Session I, Segment 5) to 45 speeches (Session V, Segment IV and Session IV, Segment I). From the domain of observation there did not seem to be apparent features to point to as determining factors as to how long the content area would self-perpetuate. No apparent orderly process was discernable through which a segment or whole session unfolded. Segmental

⁷The concepts of perturbation and deformation in autopoietic theory refer to structural transformations made by the system subordinated to its own organizational process as opposed to external events. Varela (1979) wrote: "The environment is seen as a source of perturbations independent of the definition of the system's organization and hence intrinsically nondestructive: they can trigger, but not reflect the course of transformation" (p. 262).

verbal interactions show that many messages may be exchanged within a segment boundary. From the domain of description, the "life span" of a segment seemed to be unpredictable.

If one views the verbal activities in a segment from an inner phenomenological perspective, then the life span of a segment is dependent on the content area continuing to act as a source of perturbation to the system members to the degree that they continue to exchange messages within that content area. Segment 4 of Session V was of long duration and included many message exchanges between Es and Ar as the content area of the session -- Ar's use of hypnotherapy techniques with a client -- continued to act as a source that perturbed both individuals. A sequence of verbal interactions will cease when the content area ceases to act as a source of perturbation at least within the domain of message exchanges or another content area is initiated which acts as a more powerful source of perturbation for team members thus igniting a sequence of verbal interactions around that area. Content areas may act as a source of perturbation for some, all or none of the system members. The life span of a segment was dependent on at least two members being perturbed by the content area. In segment I of Session I, a conceptualization of the problematic behavioral pattern of the client system was a content area that perturbed mainly Es and Bo. In segment 7 of session 4, it was the reality of a client's problem and tactics that the team used which is a source of perturbation to Es, Bo and a guest.

It is important to note that the constraints of the study were limited to the context of verbal interactions among members. Non verbal data as posture, facial activities and other physical nonverbal activities could also be utilized in a domain of description. Conversely, events may continue to act as a source of perturbation to individual members, even if they do not participate in observable interaction through interactions with one's own linguistic states, or, simply put, through one's thought processes. It is possible that members who are not engaged in verbal interaction are also perturbed by an event (content area) which they are reacting to covertly through their thought processes.

Conversely, it is also possible that a non-reaction to a content area is a result of that area no longer acting as a source of perturbation for a member which is determined by his own internal state at the time. The member may temporarily become structurally decoupled from other team members and reside outside the domain of consensus. For example, Li did not engage in any verbal interactions in six of seven segments in Session III. The content areas might still be acting as sources to which he was reacting to through the interactions within his own processes. Conversely, his own structural state may be as such that it is all going "by him". He may be tired or hungry or perturbed by other independent events inside or outside the context of EPC.

In summary, it appeared that the life span of a segment as defined by its content was unpredictable within this system but determined by the degree it acted as a source of perturbation for at least two system members, as determined by each member's own structural state. Verbal interactions around a content area continued for short or long durations and disappeared and reappeared in accordance with the content area retaining its "status" as a source of perturbation.

4.4 The Language of EPC

4.4.1 Introduction

One of the central defining characteristics of EPC was its language. It seemed to serve as an aspect that differentiated system members from non-members and through which its features as a "composite unity" were generated. The language was also the context through which a set of assumptions were actualized serving as a filtering mechanism through which most of the ideas and topics. It was probably the most salient feature of EPC in terms of specifying it as a system.

4.4.2 Origin and Characteristics of the Language

The origin of the language used as the primary medium for interaction among EPC members was based on a strategic psychotherapy perspective. EPC was founded and functions as

a unity in which strategic psychotherapy is carried out within a team format. The language actualizes the assumptions which generates the "language" and serves as the system parameters within which the majority of verbal interactions take place among group members.

In the following section, a number of key assumptions will be specified as generated by means of EPC's metatherapy language in the verbal interactions among its members.

4.4.3 Set of Assumptions that Guide EPC's Behavior

The first assumption is that an objective reality of a situation is inaccessible. Client problems worked with and solutions offered were not judged on a reality basis. What was considered useful was the formulations of perceptions that lead to pragmatic impacts upon the client system. Segment four of Session I in Appendix 1 contains an example of verbal interaction among team member's about the "reality" of the problem that Judy and Sandy (the client system) had presented and the "reality" of the effects that a particular strategic intervention had on the client system. Es took the position that it is not important whether or not Judy's complaint was real but the important thing was her perception. From the transcript:

Es: But as far as what was happening originally whether her complaint was legitimate in terms of reality or not I couldn't care less...mostly because what I see what is happening is a dance and not because the kid is this therefore...the mother is into any kind of situation like this, there's an element of reality in all of this but what perception does to that reality is a different

question and that's what we're working with.

Later on in the segment, the exchange of messages evolves around the "reality" of effect and a particular strategy prescribed in a previous therapy session. The main participants are Es and Ro.

Ro: The question, why I'm asking you (unclear) is because we have used this quarter strategy quite often...and in terms of the research that we are supposedly doing here, as well, I was just wondering whether we expect something so we interpret it as that or whether it really works (unclear) or we have no interest in looking at it....

Es: It's the former

Ro: All these questions

Es: It's the former I mean there's no reality attached to it. It works, It's pragmatic

Ro: But the question is does it really work or do we think it works?

Es: I think it's just we think it works

Ro: ...And that's good enough?

Ar: I think if you use that information whatever information you get as a result of that particular intervention...(simultaneous conversation)

The segment speaks for itself.

A second assumption actualized within the metatherapy language is the perception that there is no such thing as a resistant client. All client systems can be impacted and it is a matter of identifying the interactional rules of the client system and designing a strategy that will be useful in effecting a change in the interactional patterns. In segment 3 of Session II, Ro initiated a discussion about a client system whom the team has not succeeded as yet to have impacted. She questions the usefulness of present approaches which triggers other team members particularly Es and Ar to consider alternate approaches:

Ro: I was just wondering...We talk alot about resistant clients or what we perceive as resistant. Like we talked about it a little while ago saying also that it's nonsense to talk about resistance. There's no such thing. It just means that we haven't managed to understand her system yet. I'm just wondering which other ways there would be to attempt to attack that. All we're doing now is challenging her. I'm not really...

Es: Well one of the ways...

Ro: I'm not....I'm not really clear about all this, but I'm just wondering if there would be a totally different approach to working with her.

Es: One of the ways I suppose would be to acknowledge that Jay is the problem and....

A third assumption was that change can be effected in many different ways. There is no one "right" strategy or intervention which will have an impact on a client system but many different possibilities. Segment II from Session I and segment III from Session IV form examples where an exchange of messages centre around alternate strategies. Any one of these strategies may or may not be effective. Strategies are reviewed, maintained or discarded based on their actual or hypothetical pragmatic effect on the system. Segments XV through XVII from Session VI exemplify a tactic presented by Li whose potential effectiveness is questioned by the other team members, particularly Bo and Ar which leads to its being shelved at least for the time being.

A fourth assumption actualized through the metatherapy language was that reality, as a multifaceted perception, could be moved from one context to another.

Note the following interactional sequence:

Es: But we will invite him not as the person who is the problem

Li: That's right

Es: Because he has had the problem focused on him for ten years

Li: Exactly

Es: So let's get him in here as our helper rather than as the problem

(January 6, 1983: Segment 10)

Ca: The other thing that is probably important to understand that they come here at least in St's perspective they come here hearing that they are being blamed. They aren't only being blamed by the biological mother but they feel some pressure from the social service agency they're working with right now...They're defensive just to start out with, you know. They like this kid, they can't handle him and people are going to point fingers at them.

Co: Hm...Hm.

Ca: So I don't know they could have been saddled to come any other way

Es: Well I think we got to start in terms of the direction where instead of being blamed they're the only ones we have a chance of working with to get other people straightened out

Bo: I think maybe...

Es: So instead of going in and being blamed, we're forming a coalition with them and our coalition is not going to be against them but with them.

(Session III: Segment 4)

A fifth assumption and one under which all the other assumptions are subordinated was that EPC is a "cybernetic based" system. The verbal interactions centred around information derived from the client system during the therapy session as well as information self-generated by EPC. The verbal interactions were usually in the form of identifying client's interactional patterns, exchanging ideas about how the pattern was being maintained, the design of new strategies and tactics, and the evaluation of past strategies and tactics: The impetus for these discussions were derived from informational feedback from the client

system. The aim of the sessions was to design interventions which would generate additional information about the system to be incorporated in proceeding debrief sessions and used in formulating additional tactics and strategies. Indicated is the recursive nature of interactional patterns that is generated between strategy design and informational feedback. The role of information was explicitly exemplified in the following two sequences extracted from the March 17, 1983 session. In the first sequence, the team was discussing a possible tactic to be used in the next therapy session with a couple where one of the clients had a drug abuse problem.

Es: ...And then you begin with the kind of tedious question of "tell me about how much of this stuff you're taking each day and how do you set it up between you so that you're getting the amount that you need"

Bo: It's going to take me more than ...

Es: I don't care. How is it arranged? What is the arrangement? When during the day does he take it? When that line of pursuit is over you can go to another...What you have to do is hang them in there for about fifty minutes

Bo: Fifty?

Es: Fifty...of waiting for that intervention to come and so what we need to know...

Bo: (Interrupts) We need to know when you take the med, how you take it, whose in charge

Ar: Is the information you're gaining in this game of trivial pursuit really valuable or is it simply that you won't...

Es: (Interrupts) Oh it's good information and you want to keep them wondering why they're not getting to it and staying into this, getting them progressively more curious

Ar: So information per se right now, we don't necessarily...we may use it but we don't know how we're going to use it

Es: Nope

Ar: We don't know whether we're going to use it right

now...

Es: I think we probably will. Like if we're right at this point that she basically regulates him then we have to know how she's regulating it because part of our intervention is going to relate to how she regulates it

Later on in the session, there's an exchange of ideas between Es, Ar and Bo about metainformation about the client system

Es: Oh I'm sure there are. But I wonder, you see, what I see us doing is having to construct a framework, having to construct if I can call it that a diagnostic framework from which we can structure an intervention that has a good possibility of impacting what is happening in their lives. Now I don't care about the reality of this stuff but I do have to somehow construct something at which I can throw stones. So what I see anyone of us doing here is developing a construct of their relationship, a mind construct. That's all I'm doing too. What I want to do is develop a mind construct too that in such a way we can potentially affect their relationship.

Ar: Sure...maybe I'm really somehow mistating. Maybe my intention isn't becoming very clear but my vibes, I agree with that. I think though we should attempt to put out a number of constructs because all we have going our way now is the information that we have to this point of time. We may get different information.

Es: But we're also saying we want to elicit more information. We're the reason that some of the information gathering is structured the way it was for the next interview for it basically checks the hypothesis further

Bo: To get more information about the meds, when he takes it and who is in charge and other aspects of the headache

Es: Hm...Hm

A sixth assumption was accessible in what the metatherapy language did not specify. It excluded concepts of the traditional metatherapy languages; terms such as "insight", "anxiety", "illusions". The EPC's metatherapy

language would appear foreign to those versed in other metatherapy languages. Most invited guests participated on a limited basis partially because of their lack of fluency with the language. As with any other communicative language, a degree of practice is required before one will be competent in using the language in the metatherapy session. A prerequisite to learning the language would seem to be an interest in grasping the set of assumptions which is actualized through the language.

An example of how the language served to distinguish between members and non-members can be found in segment 5 of Session I. A guest who attended the session appeared to be looking for "reality" of the problem a client presented during the preceding therapy session and finds it difficult to determine whether it was real or not. A team member says to him:

Ar: I think part of the hassle is...part of the problem is, Stew...I'm not sure whether you're looking at Sandy and a problem in isolation. Like Sandy has a problem and is her problem real or not real or how real is it and that really runs counter from the set of assumptions we operate from at the very beginning so that I think it's real difficult for anybody to answer some of your questions in a form that you're prepared to understand or hear the answer

Gu: Yeah, I agree completely that it is a question that one can't answer because I have searched in my mind and I didn't find any evidence

4.4.4 Summary

From an outer phenomenological perspective, EPC's language seemed to serve as the medium through which the set

of assumptions that guide its function as a system were actualized. The set of assumptions were "accessible" to description through the verbal interactions among the interacting team members. A number of assumptions were explicated by team members through their interactions. The metatherapy language served to separate the team members from non-members and as such defined it as an autonomous unity. EPC repeatedly re-assembled on a weekly basis and reproduced itself through its verbal interactions. As such from a domain of description the language is a constraining feature of the system. From an inner phenomenological perspective the role of language in a system is much broader.

4.5 Language and Set of Assumptions Belong to Two different Phenomenological Domains

The set of assumptions specified in the previous section reflected the members' preoccupations with an entity external to its own system, namely the client system. The verbal interactions among the members seemed to indicate a purposefulness to their meeting together which in turn seemed to be in the form of developing some kind of strategies which would have an of impact on a client system. From a domain of an outer phenomenological perspective, the system behaves as an allopoietic system whose aims seem to lie external to its own self perpetuation. A Content Analysis of the segments would demonstrate that the team

members were usually talking about a system external to their own, shifting back and forth between diagnosis and strategic/tactical designing. As a cybernetic-like system, it appeared to organize itself (communicate) around inputs in the form of information derived from its environment (the client system) and outputs in the form of goal-orientated behavior to effect that environment.

The "language" of the system "behaved" in an opposite manner. The language seemed to be a central characteristic in specifying EPC as an autonomous system. It was the domain through which all incoming phenomena were filtered and reacted to. Whatever could not be discerned through the system's language would be ignored or discarded. Conversely, all outgoing phenomena were sent through the system's language. That which could not be talked about within the language context was not spoken. From an inner phenomenological perspective, language seemed to be the self-perpetuating feature generated by a closed system. Indeed, Maturana (1978) described language as existing "in a consensual domain generated by interactions of a closed system" (p. 56).

Two apparent contradictory types of behavior seemed to be indicated. Through its set of assumptions, EPC seemed to behave as if it were a purposeful system whos "product" lies outside of its own organization. Through its language, EPC behaved as if it were a self-organizing entity with its own autonomous features. It behaved as a composite unity. This

brings the study back to the question of whether human social systems are sufficiently characterized as autopoietic systems or whether other characteristics are involved in the generation of their organization. The conceptualization of human systems as being teleological in essence is one which is adopted by most traditional small group theorists, but in contradiction to those who perceive human social systems as self-organizing. The topic will be explored more fully in the next chapter. However, via EPC one may be able to formulate some ideas. EPC through its set of assumptions, although purposeful in nature, explicitly recognizes the tentative nature of reality. It recognizes that every one of the positions it takes *vis a vis* a client system is basically a hypothesis or hypothesis checking. It recognizes that any intervention it will prescribe may have no impact on the client and that is a process that continues indefinitely. Implicit is a recognition of the autonomous nature of each client system. Whether an intervention has impact is determined by the state of the client system at the time. That does not stop EPC from trying but in a way that approaches each session as if it were Chapter I, discarding old ideas and formulating new ones.

5. DISCUSSION

5.1 Introduction

An exchange of ideas continues about the nature of organizational characteristics of human systems. Maturana and Varela (1975) demonstrated disagreement with each other's position by side-stepping the issue. They wrote:

What about human societies, are they as systems or coupled human beings also biological systems? Or in other words, to what extent the relations which characterize a human society as a system constitutively depend on autopoiesis of the individuals which integrate it? If human societies are biological systems the dynamics of a human society would be determined through the autopoiesis of its components. If human societies are not biological systems the social dynamics would depend on laws and relations which are independent of the autopoiesis of the individuals which integrate them. (Ibid., p. 73).

In the present study, the organizational characteristics of a particular human social system in the form of a small group was described by means of the verbal interactions among the interacting members. The aim of the study was meant to be of an exploratory nature in which ideas and hypotheses about the nature of human systems could be explored, hopefully leading to further descriptive studies in this area. EPC is not meant to be representative of all human systems; but only of itself and only within the spatio-temporal frame it was observed.

5.2 Summary Statements About EPC

The central feature through which EPC seems to define and organize itself as a composite unity is through its metatherapy language. The language serves to differentiate members from non-members and to endow EPC with a unique identity. Through its language a set of assumptions which guide its activities are actualized. The assumptions appear to be related to and aimed at an entity outside the domain of its own systemic parameters. An explication of the assumptions demonstrated that EPC has purposeful intentions insofar as to affect an impact on a client system. A third feature that characterized the relations between EPC members was individual fluctuations between segments and sessions with respect to the degree members participated in verbal interaction. Some members participated more often in some segments/session while other members participated more often in other segments/session. Overall, three levels of verbal participation were identified. In addition the life span of segments were different and unpredictable from each other. The durations ranged from a segment which contained only one speech to segments that contained forty-five speeches. A visual representation of "whole session verbal interactions" (Figure VII, Appendix 1) indicated that no two interactional patterns were exactly alike and they seemed to show that the structural components may be linked together in multiplicity of patterns which are unpredictable *a priori*.

5.3 Autopoietic or Allopoietic

EPC as a human social system in the form of a small group did seem to manifest many characteristics of self organization and self renewal. From a domain of description, it acted as an autonomous organization with an identity of its own. Its central autonomous property was its language. All incoming and outbound information were filtered through EPC'S metatherapy language. Whatever was not sifted through lay outside EPC's domain of distinction. Maturana (1978) pointed out that "human beings can talk only about that which they specify through their operations of distinction" (p. 56). Each human being, as a closed system in itself, can only make those distinctions that "their structural coupling to a medium permits" (Ibid., p. 56). The language was the natural medium through which EPC as a system generated by the interactions of its interacting members was realized. The system members became structurally coupled and constituted a consensual domain by means of the metatherapy language. Through its language, the verbal interactions among the interacting members was continually reproduced.

EPC as a human social system seemed to behave in an organizationally closed manner. Ideas or perceptions about therapy which were not acceptable to the domain of its language and the assumptions actualized through the language could not constitute domains of distinction for team members for it lay outside its domain of consensus. What information from an external source acted as a source of perturbation to

the system was structurally determined by EPC's language which specified its organization as a system. EPC communicated about client systems within a context that included such terms as "interactional patterns", "first position", "position shifts", "alternate strategies", "pragmatic use of information" etc. Guests, for example, who could not communicate the language usually had very limited involvement with the debrief session.

5.3.1 Differences Between a Conversational and Consensual Domains

Maturana (1978) makes an important distinction between verbal interactions in a consensual domain and in a conversational domain. As opposed to the former, verbal exchanges in a conversational domain are "pre-communicative and novel" and therefore may or may not have any effect on the participants which is dependent on the members undergo "non trivial structural changes" and the generation of a consensual domain. Guests' and members' verbal interactions may remain in a domain of conversation which basically means nothing happens to anyone. A more well known example of a social system where most conversations seem to remain in a conversational domain is the United Nations.

5.3.2 EPC Exists Within Everchanging Structures

A second feature of self-organizing systems manifested by EPC was its everchanging structural manifestations. As

demonstrated by visual presentation, the system constituted itself in a variety of different interactional patterns. None of the patterns seemed to be predictable. In some segments some components engaged in verbal interactions and in other segments different members took over. In addition, the sessions indicate that not all members needed to be present for EPC to reproduce itself. In many of the observed sessions, some members were missing but EPC was still able to regenerate its organization. It would seem that its existence as a system in its present context was independent of any one particular structural component. Theroretically, as long as two or more members reassembled and served as sources of "compensatory deformation" for each other in a domain of consensus, EPC's identity was preserved.

Varela (1979) stresses that no present structural state of a self-organizing system can be used to predict a future structural state of the system. He states:

Prediction of a future state of a machine consists only in the accelerated realization in the mind of an observer of its succeeding states, and any reference to an early state to explain a later one in functional or purposeful terms is an artifice of his description... (p. 15).

5.3.3 EPC as Part of a Larger Ecosystem

Through an examination of the verbal interactions among team members, it was noted that the assumptions specified through language seemed to be aimed at having an effect on an external system, specifically a client system. From a domain of description EPC seems to demonstrate

purposefulness oriented towards a goal that lies outside of its own self-perpetuation. Its operations as a system appeared to be centrally aimed at producing an effect on another organization.

Intuitively and within traditional small group research, the organization of human social systems do seem to be attributed with purposefulness in the form of attempts to influence another system with which it is "in relation". Union negotiating teams try to influence employer representatives to get better wage and working condition settlements. Conversely, employer reps attempt to modify union demands. Teachers meet with pupils to try and "educate" them while their pupils try to influence the teachers to give them better marks. World leaders meet with other world leaders to try to negotiate agreements with each side striving to gain a maximum benefit. Each system seems to behave as if it is in direct contact with another system trying to influence each other within a context of direct input and output mechanisms. Intuitively it seems as if one group often expects another group to behave in a certain manner simply because they expect to have some influence through their interaction with that group.

From the perspective of autopoietic organization, function or purpose is not applicable in explaining the organization of a living system. Like prediction, "function is established by an observer and belongs exclusively to his domain of description" (Ibid., p. 17).

From an observer's domain of description, an autopoietic system can appear to behave as if it were an allopoietic component within a larger ecosystem. For example, the purpose of EPC's interactions seems to be related to its relationship with a client system.

If EPC is conceptualized as an autopoietic system, then purpose is non-informative with reference to the nature of its organization. Its organization as a human social system will stem from itself through the interactions of its interacting members within a domain of language. All changes will be subordinated to its own organization, as determined by its own structure. Purpose will belong to a domain of description independent of the system's actual organizational properties.

5.3.4 System Within System Within System

A conceptualization of human social systems as demonstrating self-perpetuating characteristics implies that all levels of human systems -- individuals, small groups, organizations, institutions, countries -- of necessity consist of the same stuff; that being *self-organization and autonomy*. How a human system reacts to another human system is determined by its own structural state. Conversely, how a system tries to influence another human system is also determined by its own structural state. The activities, then, of different levels of human systems must be considered subservient to the self-organizational processes

of its own system.

Beer (1975), a strong advocate of the autopoietic nature of human systems, notes some "extremely important consequences"

In the first place it means every social institution (in several of which any one individual is embedded at the intersect) is embedded in a larger social institution, and so on recursively...and that all of them are autopoietic... (p. 13).

What is implied is that social entities could never have direct influences on each other because of the autonomous nature of each one's organization. The ties among human social systems must then be conceptualized as being through each system's own structural nature. Beer continues and points out that in actuality human systems do not perceive each other as being autonomous. As part of a larger human system such as a country, an embedded system is usually perceived as being allopoietic with regard to the larger system. He mentions:

Now this in turn means that the larger system perceives the embedded system as diminished...as less than fully autopoietic. The perception will be an illusion; but it does have consequences for the contained system. For now its own autopoiesis must respond to a special kind of constraint; treatment which attempts to deny its own autopoiesis. (Ibid., p. 15).

The autonomous nature of each human system, both of the individual and social system level, is often neglected in man's transactions with each other. A conceptualization of human systems as autopoietic is a statement of recognition that human systems within all levels are similar with respect to the characteristics of *difference*. Human beings

and their social groups are the same with respect to their autonomous nature. As indicated by others (Maturana & Varela, 1975; Beer, 1975), an acceptance of this kind of conceptualization would have far-reaching political and ethical consequences.

From the author's perspective, if human beings did become more aware of each other's autonomous properties, a greater chance would be given to dialogue and negotiation in human relations. It would be recognized that human system A couldn't possibly perceive a situation in the same light as human system B because of their autopoietic nature". System A would recognize that it could never have direct influence on System B because any changes in System B would be subordinated to its own structural state. Numerous alternate strategies may have to be implemented before A would have an impact on B. System A would recognize that any particular strategy it attempts may end up in "oblivion" because it was not designed in a form that could be accepted by System B.

In the present study, EPC is an excellent example of a human system that recognizes the basic autonomy of the client system. All hypotheses about the client system are checked out through strategies and tactics that are designed based on the hypotheses. Information received is used as a source of confirmation or modification of future hypotheses or strategies. It is recognized that any given strategy may have no impact at all. Intuitively EPC seems to be unique as a human system insofar as information is used

on a pragmatic level. It seems that in today's world, many human systems expect to modify other human systems within a direct input/output context. Information is not adjusted to, but rather more behavior of the same is offered vis a vis a system B. Examples include those that threaten the very existence of mankind -- escalating arms race, superpower intervention in Third World countries and satellite countries, acid rain and other pollutants that threaten our water system. An acceptance of man's commonality through difference could possibly lead to more flexible positions in the relations within and between human systems, as opposed to the more apparent stagnant-like positions that seem to characterize human relations at different human levels. Jantsch (1980) wrote:

Perhaps we ought to interest ourselves at the social and cultural level more in the symbiosis of subglobal autopoietic systems, in pluralism and non-equilibrium, than in a Utopian world government and world culture. (p. 73).

5.3.5 The Individual in Human Systems

An individual will usually be a member of many different human systems -- family, group of friends, workplace, community league, special interest groups. Within each system, conceptualized as being autopoietic, each individual is also a self-organizing system. One is an autonomous member of many autonomous organizations. Although structurally coupled and a component part of a consensual domain in each organization, the degree of one's involvement

in each organization within each "temporal-spatial" space may fluctuate as determined by one's own inner state at any time. In some organizations, an individual may be more centrally involved and in others more peripherally involved. In some contexts, he may physically be "there", but in terms of structural state, be somewhere else.

It appears that a human social system different degrees of structural coupling do exist. With each dismantling and reassembling of a social system, the potential for structural coupling changes in terms of the "strengthening" or "weakening" of one's "connectivity" to the system. Beyond a certain threshold, as determined by its own structural state, a given component (individual) may leave the system. Conversely, new structural components could join a system. The characteristic of continual structural changes falls within the definition of autopoiesis. A system's existence as a system may continue within a wide range of "structural deformation". Its identity is determined only by the interactions of the interacting components independent of internal structural changes. An implication for human systems is that systems continue to exist independent of membership composition.

5.4 Differences Between Biological and Human Systems

A major argument against conceptualizing human systems as autopoietic is the fact that they are perceived as being synthetic systems as opposed to physical systems. Maturana &

Varela (1975) state that it is the concrete manifestation of physical systems that enables one to talk about them as entities. In their words

These features of the actual concreteness of autopoietic machines embodied in physical systems, allow us to talk about particular cases, to put them in our domain of manipulation and description and hence, to observe them in the context of a domain of interactions which is external to their organization. (p. 19).

Intuitively investigators of human social systems seem to behave the same way vis a vis the systems that they research. The same metaobservational principles used to describe the behavior of investigators vis a vis physical systems as capsulized in the above quotation would seem to be applicable to all investigators whose context of research always entails a domain of interaction with what is researched.

A second difference between biological and human social systems is that biological systems are perceived as being "living" systems. As living systems they are characterized by their autopoietic characteristic. Maturana and Varela state "autopoiesis is necessary and sufficient to characterize the organization of living systems" (Ibid., p. 10). Advocates of "social autopoiesis" stress that although it may be difficult to ascertain whether human systems are "alive", they seem to be characterized by considerable plasticity and demonstrate autonomous properties. Beer (1975) wrote:

It does not matter about this mere word 'alive'. What does matter is that the Social

Institution has identity in the biological sense.
(p. 15).

Zeleny (1980) stated:

Thus, we introduce a notion of social autopoiesis, implying that human societies are autopoietic, if not living, systems of considerable plasticity. (p. 3).

In contrast to biological systems where structural coupling occurs in a physical domain, human social systems are generated mainly but not exclusively in a domain of language.⁸ In that context however human social systems act as unities in a biological sense; that is as organizationally closed entities (Maturana, 1978). The "interactions between interacting components" (individuals) in a domain of language is of the same stuff that specifies autopoiesis in the biological domain.

A third important difference is that human systems consist of components (humans) that have "self-reflective minds" enabling us to construct outer realities independent of any physical constraints which can be tested through planning and implementation. Through one's interactions with one's own states (mind), new unities evolve from the structural coupling of old ones. An ability to perceive phenomena in "unlimited" ways is potentially available to human beings and their systems.

There are important differences between physical and human systems. The discussion should be directed along more pragmatic lines. The important question is whether it would

⁸Human sexual behavior would seem to reflect more a physical system than a synthetic system.

be useful to conceptualize human systems as autopoietic irregardless of whether it is a "living organization" or not.

5.5 Future Research

Additional research is needed within the realm of human social systems in order to generate more information about their organizational nature. Additional naturalistic studies of small groups would be in order using both an inner and outer phenomenological approach of interest would be descriptive studies of small groups language and its relationship to how the group is organized with respect to diversity of interactional patterns and kinds of structural deformations it tolerates. Intuitively a human system generated by unidirectional language would probably be reflective of a system manifesting somewhat rigid interactional patterns. Conversely, a human system specified by multidimensional language would probable be reflective of a system characterized by more diversified interactional patterns.

Longitudinal research would be useful for noting the nature of structural changes human institutions may undergo as a result of, (from a domain of descriptive) functional changes in the context of an ecosystem. Real life examples include political parties who for decades have been opposition parties and suddenly they came into power, businesses that move from one field of endeavour into a

totally unrelated field of endeavour, or functional changes that occur as a result of natural disasters or unexpected events as a low income family winning a million dollars from a lottery ticket. In what ways do their structural characteristics change? Under what conditions is there a disintegration of the organization of a human system as a result of functional change? A difficulty in carrying out this kind of study would be a lack of access for observation and description of antecedent interactional patterns. A researcher would have to depend on indirect methods as questionnaires or self-report methods for generating information about the human social system prior to the functional change.

Studies of higher level human social systems utilizing descriptive methods applied to lower level human systems is of extreme importance for capturing the nature of human systems as ecosystems. In the area of counselling, that would include a study of the therapist-client as a whole system. In other domains, that would include negotiating teams, usually viewed as dualities (employer-employee, east-west leaders, professor-student) studied as a single composite system. It is recalled that one of the properties of observer systems is their capacity for delimiting the boundaries of the system under investigation. The observer creates the context for the investigation. Beyond that, the organizational principles of human social systems, if conceptualized as autopoietic, have many commonalities

whether one bites off a small piece of the ecosystem pie or a larger piece. Autopoietic theory potentially frees investigators to carry out research at higher and more meaningful levels.

A fascinating research project would be to follow an individual or a number of individuals within a number of different systemic contexts like family, workplace, club, social gathering and note the interactional patterns in each context including rate and manner of participation as discernable through verbal and non-verbal observing techniques. Both inner and outer phenomenological approaches could be utilized for describing the structural changes an individual goes through both from a domain of description and domain of autopoiesis.

5.6 Limitations

A limitation of the study was that mainly verbal data was observed and described. It is possible that individual members though quiet in the interactional segments may have demonstrated being perturbed by a content area in non-verbal ways. In addition, a non-speaking member may have acted as a source of perturbation for other members. More complete observational tools should include ways of noting non-verbal perturbances. An example of a study that did include non-verbal data is Scheflen (1973). He and his colleagues applied verbal and non-verbal observable methods in describing the communicational structure of a psychotherapy

transaction.

5.7 Implications in the Area of Psychotherapy

A number of implications for psychotherapy emerge from a conceptualization of human social systems as autopoietic in nature.

The impact a psychotherapist may have on a client system is determined not only by the methods or strategies that a therapist may use, but by the client's own organizational sources. Effects that we as observers ascertain as originating from the therapist system is relevant only in a domain of description. Whether an intervention or technique acts as a source of perturbation to the client system is specified by the client system's own self-organizing qualities.

This is not to say that a role of a psychotherapist is minimal in the therapy context. On the contrary, a view of client systems that recognizes them as closed systems incorporates the necessity of expanding the role of the psychotherapist from a practitioner, to a practitioner, theorist and researcher. As a theorist, the psychotherapist formulates hypotheses about the client system and the interactional patterns that specify the client system's organization. As a researcher, the therapist devises, and implements strategies aimed at impacting the client system. The resulting interactions are used as a basis for formulating additional hypotheses and strategies. By

recognizing the autopoietic nature of a client system, the therapist realizes that the two systems may continue along a circular journey indefinitely. By taking the stand of a researcher and theorist continued search will provide methods that will effect the client system.

An important capacity recognized in the metaobservational theory is that a property of an observer system is the capacity to specify the boundaries of one's distinctions. An implication for a therapist is the choice that one has in specifying a system's boundaries. At times a therapist may find it useful to perceive oneself and the client system as two separate entities where metaphorically the therapist steps out of the frame and attempts to view it from a domain of description. At a higher level, a therapist may find it useful to view the client-therapist system as a single system recognizing the mutual influences the client and therapy systems have on each other. Quite often therapists ignore the fact that clients direct therapists' behavior in the same manner that therapists direct clients' behavior.

A shift in epistemology that incorporates the 'helper' in what he is 'helping' requires a shift of focus from questions of objectivity or subjectivity to questions of ethics and responsibility. Van Foerster (Cited in Keeney, 1983) described the shift to a participatory, ethical perspective as a "shift from causal unidirectional to mutualistic systemic thinking, from a preoccupation with the

properties of the observed to the study of the properties of the observer" (p. 81). Keeney continued:

Since we each prescribe particular ways of punctuating the world, it is important to examine the intentions that underlie our punctuative habits. In sum the distinctions we make in order to know the human world arises from an ethical, not objective or subjective base. (Ibid., p. 82).

5.8 Some Concluding Comments: Metaresearch

In his classic *I and Thou*, the great philosopher Martin Buber (1974) conceptualized many similar ideas with respect to the nature of man's relationship with his world as expressed by Varela, Maturana and others. Within metaobservation theory, he differentiates between "I - you" and "I - it" relationships. "I - you" involves a direct relationship with another entity that is based on an unmediated reciprocal encounter. In his words:

Relations is reciprocity. My "you" acts on me as I act on it. Our students teach us, our works form us. Inscrutably involved, we live in the currents of universal reciprocity. The "I - it" relationship involves a separation of the "I" from the "you" with the you becoming a "thing", an object. (p. 67)

He states that a person who takes an "I - it" position

assumes a position before things but does not confront them in a current of reciprocity. He bends down to examine particles under the objectifying magnifying glass of close scrutiny or he uses the objectifying telescope of distant vision to arrange them as mere scenery...he isolates them without any world feeling. (Ibid., p. 80).

Invariably, Buber notes, "every 'you' in the world is doomed by its nature to become a thing or at least to enter into thinghood again and again" (p. 69). At the same time,

he continues and states that "everything in the world can -- either before or after it becomes a thing -appear to some 'I' as its 'you'" (Ibid., p. 69).

Two levels of interaction between a describer-described system are recognized in Buber's schema as in Maturana and Varela's metaobservation perspective. One scheme of research conceptualized as an "I - it" relationship or "knower-known" interaction will give more information about the investigator with respect to the categories, concepts and theoretical frame employed than about the object of research. The second scheme within a "holistic" context whether it be conceptualized as self-organization or an "I - you" relation will give greater information about the research object. In the latter context, the thing is allowed to represent itself.

It is crucial that a researcher specify the level of interaction with phenomena his research involves. Conversely, a piece of research should be evaluated by the community of investigators who come in contact with it at its proper level. Perhaps an outer phenomenological approach is important in scientific investigation so that researchers could exchange ideas about their perceptions of a unity that may be of heuristic value. However, it should be recognized that what they are talking about probably says very little about the nature of the relations that characterize that unity at least within the context of living systems. It will say a lot about the researcher's frame of reference.

Researchers studying human systems must pay more attention in using research strategies in which the characteristics of that particular human system are presented as they are. Strategies should include methodologies that enable human systems to present themselves in different spatio-temporal contexts (see section 5.5). A conceptualization of human systems as autopoietic in nature would provide a theoretical framework for research within a holistic framework providing a closer approximation of the thing itself.

However, as long as man creates the context of his study and makes statements about the focal unity, an interaction with a unity is entailed and as Maturana (1978) points out, the reality of that unity can never be the unity itself, but a domain as "specified by the operations of the observer". So absolute reality is impossible at least within a domain of metaobservation that involves an exchange of perceptions between a community of researchers entailing a verbal description. It seems that whatever can verbally be described and discussed can't be known. Wittgenstein (1971) wrote:

whereof one cannot speak, thereof one must be silent" (p. 159).

The final quote belongs to Martin Buber:

The form that confronts me I cannot experience nor describe. I can only actualize it. And yet I see it, radiant in the splendor of the confrontation, far more clearly than all clarity of the experienced world. Not as a thing among the "internal" things, not as a figment of the "imagination" but as what is present. (p. 61).

REFERENCES

REFERENCES

- Bales, Robert Fred. (1970). Personality and interpersonal behavior, (pp. 1-29 and pp. 91-135). New York: Holt Rinehart and Wilson.
- Bales, R.R., & Cohen, S. P. (1979). SYMLOG/A System for the Multiple Level Observation of Groups. New York: The Free Press, 1979.
- Bateson, G. (1972). Steps to an ecology of mind. (p. 381). New York: Ballantine.
- Bateson, G. (1979). Mind and nature: A necessary unity. (pp. 25-64). New York: E.P. Dutton.
- Bateson, G., Jackson, D.D., Haley, J., and Weakland, J. (1956). Towards a theory of schizophrenia. Behavioral Sciences, 1, 251-264.
- Beer, S. Introduction. (1975). In H. Maturana & F.J. Varela (Eds.), Autopoietic systems. (pp. 1-16). Urbana-Champaign: Biological Computer Laboratory.
- Buber, Martin (1974). I and thou (pp. 53-54) . New York: Charles Scribner's Sons.
- Clarke, G. T. (1981). Patterns of family interaction in the context of chronic illness. Unpublished Master's thesis, University of Alberta, Edmonton, Alberta.
- Cornwell, M. & Person, A. (1981). Cotherapy teams and one way screen in family therapy, practice and training. Family Process. 20 p. 199-208.
- Doane, J.A.(1981). Parental communication deviance and affective style. Archives of General Psychiatry, 38, 679-685.
- Fisher, B. A. (1974). Small group decision making (pp. 1-27). New York: McGraw-Hill Book Company.
- Friedman, J.C. & Friedman, A.S. (1970). Characteristics of schizogenic families during a joint atory-telling task. Family Process, 9, 333-354.
- Haley, J. (1968). Family experiments: A new type of experimentation. In D. D. Jackson (Ed.), Communication, Family and Marriage -- Human Communication(pp. 261-284). Palo Alto: Science and Behaviour Books Inc.

- Hannum, J. W. (1980). Some cotherapy techniques with families. Family Process, 19, 161-167.
- Hansen, C. (1981). Living in with normal families. Family Process, 20, 53-75.
- Hare, P.A. Theories of group development and categories for interactional analysis. Small Group Behavior, 4, 259-304.
- Harper, J.M., Scoresby, A.L. & Boyce, W.D. (1977). The logical levels of complementary symmetrical and parallel interaction classes in family dyads. Family Process, 16, 99-209.
- Huston, T.L. & Robins, E. (1982). Conceptual and methodological issues in studying close relationships. Journal of Marriage and the Family, 44, 901-925.
- Jackson, D.D. (1968). A method of analysis of a family interview. In D.D. Jackson (Ed.), Communication, family and marriage: Human communication. Vol 1, (pp. 230-256). Palo Alto: Science and Behavior Books Inc.
- Jantsch, E.(1980). The self orgaizing universe. New York: Pergamon Press.
- Jones, J.E. (1977). Patterns of transactional style in the TAT's of parents of schizophrenics. Family Process, 16, 327-337.
- Keeney, B.P. (1983). Aesthetics of change. New York: The Guilford Press.
- Lake, R. (1970). The varieties of communicative experience. Comparative Group Behavior, 1, 305-314.
- Leibowitz, B. (1976). Books (Review of How behavior means). Family Process, 15, p. 450.
- Matthews, K.L. (1981). An interdisciplinary training model for family therapy. Family Therapy, 8, 179-185.
- Maturana, H. (1978). Biology of language: The epistemology of reality. In G.A. Miller & E. Lenneberg (Eds.), Psychology and biology of language and thought (pp. 27-63). New York: Academic Press.
- Maturana, H. (1980). Autopoiesis: Reproduction, heredity and evolution. In M. Zeleny (Ed.), Autopoiesis, dissipative structures and spontaneous social orders (pp. 45-80). Boulder: Western Press.
- Maturana, H. & Varela, F. (1975). Autopoietic systems.

Urbana-Champagn: Biological Computer Laboratory.

Minard, S. (1976). Family systems model in organizational consultation: Vignettes of consultation to a day care centre. Family Process, 15, 313-320.

Mishler, E.G. & Waxler, N.E. (1966) Family interaction and schizophrenia. Archives of General Psychiatry, 15 64-74.

Montgomery, J. (1982). Personal communication.

Nixon II, H.L. (1979). The small group (pp. 25-53, 86-87). Englewood Cliffs: Prentice-Hall Series.

Papp, P. (1980). The Greek chorus and other techniques of paradoxical therapy. Family Process, 19, 45-59.

Pentony, P. (1970). Persons as teams: An analogy. Comparative Group Behavior, 1, 211-268.

Phillips, G.M. (1973). Communication and the small group (pp. 34-46) (rev. ed.). Indiannapolis: Bobbs-Merril Company Inc.

Reiss, D. (1971). Varieties of consensual experience I. A theory for relating family interaction to individual thinking. Family Process, 10, 1-28.

Reiss, D. (1971). Varieties of consensual experience II. Dimensions of a family's experience of its environment. Family Process, 10, p. 28-35.

Riskin, J. (1964). Family interaction scales: A preliminary report. Archives of General Psychiatry, III, 484-497.

Riskin, J. and Jackson, D.D. (1968). Methodology for studying family interaction. In D.D. Jackson (Ed.), Communication, family and marriage -- Human communication. Vol 1. (pp. 251-160). Palo Alto: Science and Behaviour Books, Inc.

Riskin, J. (1976). Nonlabelled families interaction: Preliminary report on a prospective study. Family Process, 15, 433-439.

Riskin, J. (1982). Research on nonlabelled families: A longitudinal study. In F. Walsh (Ed.), Normal family processes (pp. 67-93). New York: Guilford Press.

Riskin, J. & Faunce, E.G. (1970A) Family interaction Scales. Archives of General Psychiatry, 22, 504-512.

Riskin, J. & Faunce, E.G. (1970B). Family interaction scales: Discussion of methodology and substantive

- findings. Archives of General Psychiatry, 22, 527-537.
- Riskin, J. and Faunce, E.G. (1972). An Evaluative Review of Family Interaction Research. Family Process, 11, 365-455.
- Rosenfeld, L.B. (1973). Human interaction in the small group setting (pp. 18-24). Columbus: Charles E. Merrill Publishing Company.
- Runcie, J.F. (1973). Group formation: Theoretical and empirical approaches. In Small Group Behavior, 4, 181-203.
- Scheflen, A.E. (1973). Communicational structure: Analysis of a psychotherapy transaction. Don Mills: Indiana University Press.
- Schichor, D. (1970). Nonconformity patterns of different types of leaders in small groups. Comparative Group Behavior, 1, 269-274.
- Sterk, J. (1981). Impact of Family Therapy. Unpublished doctoral dissertation, University of Alberta, Edmonton.
- Varela, F.J. (1976). Not one, not two. The Coevolution Quarterly, Fall, 62-67.
- Varela, F.J. (1979) Principles of biological autonomy (pp. 14-15 and pp. 161-163). New York: North Holland.
- Wall, D. (1982). Indian sociological identification and political consequence. Unpublished master's thesis. University of Alberta, Edmonton, Alberta.
- Watzlawick et al., P., Beavin, J., & Jackson, D. (1967). Pragmatics of human communication: A study of interactional patterns, pathologies and paradoxes. New York: W.W. Norton.
- Wittgenstein, L. (1971). Tractatus Logico-Philosophicus (p. 159). London: Routledge, Kegan, and Paul Ltd.
- Wynne, L.C. & Singer, M.T. (1963). Thought disorder and family relations of schizophrenics II: Classification of forms of thinking. Archives of General Psychiatry, 9, 199-206.
- Zeleny, M. (1980). Autopoiesis, a paradigm lost. In M. Zeleny (Ed.), Autopoiesis, dissipative structures and spontaneous social orders (pp. 3-43). Boulder: Western Press. Series, 1980, pp. 3-43.
- Ziegler, R.G. & Musliner, P. (1972). Persistent themes: A

naturalistic study of personality in the family. Family Process, 16, 293-305.

APPENDIX 1
Tables and Figures

TABLE I
NUMBER OF SPEECHES BY EACH TEAM MEMBER PER SESSION

DATE	TEAM MEMBER							TOTAL
	Es	Li	Ca	Co	Ro	Ar	Bo	
November 26, 1982	35 (2)	6 (4)		2 (6)	4 (5)	12 (3)	41 (1)	100
January 6, 1983	40 (1)	18 (4)		3 (5)	19 (3)	19 (3)	33 (2)	132
January 20, 1983	21 (1)	1 (6)	12 (3)	7 (5)	8 (4)	15 (2)	8 (4)	62
February 6, 1983	49 (1)	19 (3)	23 (2)		23 (2)	15 (4)	15 (4)	144
February 20: 1, 1983	64 (1)	49 (2)		15 (5)		47 (3)	32 (4)	207
February 20: 2, 1983	33 (1)	19 (4)	30 (2)	8 (6)		14 (5)	28 (3)	132
TOTAL	242	112	65	35	54	122	157	777
Average Speeches Per Session	40.3	18.6	21.6	7	13.5	20.3	26.1	
Overall Average Rank	(1)	(5)	(3)*	(7)*	(6)*	(4)	(2)	

TABLE II
NUMBER OF SEGMENTS EACH MEMBER PARTICIPATED IN VERBAL INTERACTION PER SESSION

DATE	TOTAL SEGMENTS	TEAM MEMBER						
		Es	Li	Ca	Co	Ro	Ar	Bo
November 26, 1982	7	7	2		1	3	5	7
January 6, 1983	12	10	8		3	6	8	11
January 20, 1983	7	4	1	5	3	3	4	4
February 6, 1983	6	5	3	4		4	2	5
February 20: 1, 1983	10	10	8		6		9	10
February 20: 2, 1983	7	6	6	3	4		6	5
TOTAL	49	42	28	12	17	16	34	42
Percentage of Total	100	87.7	57.1	60*	39.8*	51.6*	69.7*	87.7
Rank Order		(1)	(4)	(3)	(6)	(5)	(2)	(1)

TABLE III
NUMBER OF SEGMENT INITIATIONS PER MEMBER PER SESSION

DATE	TOTAL SEGMENTS	TEAM MEMBER							
		Es	Li	Ca	Co	Ro	Ar	Bo	(Gu)
November 26, 1982	7	2	1		1	1		2	(-)
January 6, 1983	12	3	3		1	1		2	(2)
January 20, 1983	7	2	1		1	1		1	(1)
February 6, 1983	6	1	1	2		1			(1)
February 20: 1, 1983	10	2	2				3	3	(-)
February 20: 2, 1983	7	2	2				1	2	(-)
TOTAL	49	12	10	2	2	4	5	10	
Percentage of Total	100	24.4	20.4	10	4.6	12.5	12.0	20.4	
Rank Order			(1)	(2)	(5)*	(6)*	(3)*	(4)	(2)

TABLE IV
NUMBER OF DYADS TEAM MEMBER PARTICIPATES IN PER SESSION

DATE	T E A M M E M B E R						
	Es	Li	Ca	Co	Ro	Ar	Bo
November 26, 1982	4	1				1	5
January 6, 1983	4	2			2	1	2
January 20, 1983	2	1	1		2	4	
February 6, 1983	4	2	2		3	1	2
February 20: 1, 1983	6	7	3			3	3
February 20: 2, 1983	3	2	2			1	1
TOTAL	23	15	5	3	7	11	13
Average Per Session	3.8	2.5	1.6*	0.6*	1.7*	1.8	2.1
Overall Average Rank	(1)	(2)	(6)*	(7)	(5)	(4)	(3)

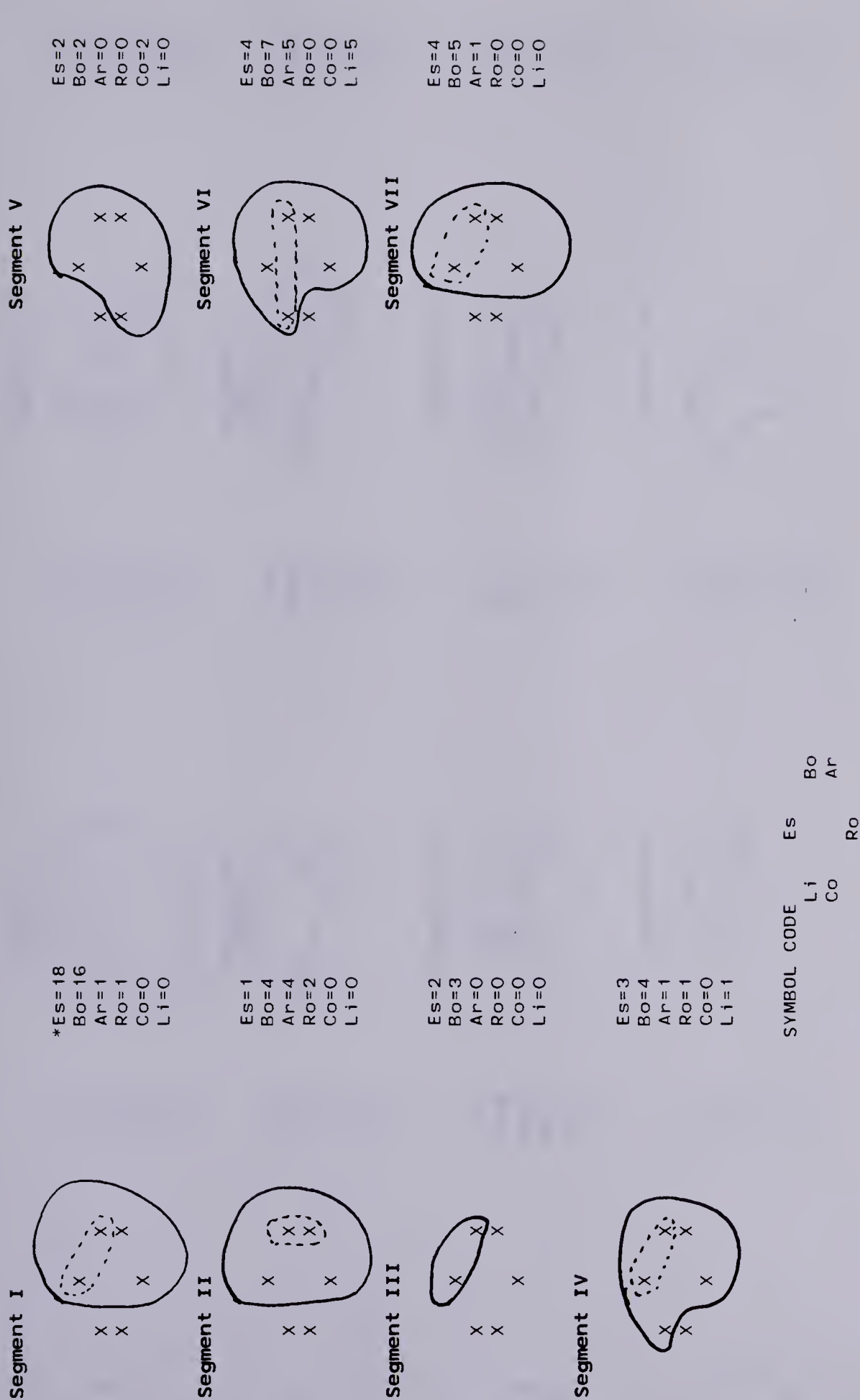


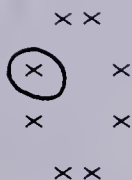
Figure I. Visual Conceptualization of Segmental Verbal Interaction Between EPC Members--November 26, 1982 (Session I)
* No. of speeches made by system member per segment



Figure II. Visual Conceptualization of Segmental Verbal Interaction Between EPC Members--January 6, 1983(Session II)

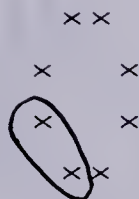
Segment V

Es=0
Gu=1
Bo=0
Ar=0
Ro=0
Co=0
Ca=0
Li=0



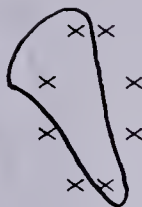
Segment VI

Es=1
Gu=0
Bo=0
Ar=0
Ro=0
Co=0
Ca=0
Li=1



Segment VII

Es=0
Gu=2
Bo=1
Ar=0
Ro=0
Co=0
Ca=1
Li=0



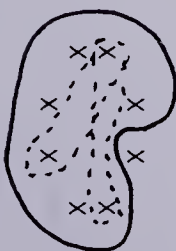
Segment I

Es=10
Gu=3
Bo=0
Ar=1
Ro=3
Co=1
Ca=1
Li=0



Segment II

Es=3
Gu=0
Bo=0
Ar=9
Ro=1
Co=0
Ca=7
Li=0



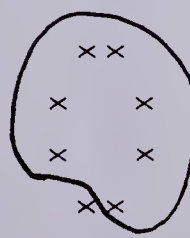
Segment III

Es=0
Gu=0
Bo=3
Ar=3
Ro=4
Co=3
Ca=1
Li=0



Segment IV

Es=7
Gu=1
Bo=1
Ar=2
Ro=0
Co=3
Ca=2
Li=0



SYMBOL CODE Es Gu Bo
 Li Ca Ar
 Co Ro

Figure III. Visual Conceptualization of Segmental Verbal Interaction Between EPC Members--January 30, 1983(Session III)

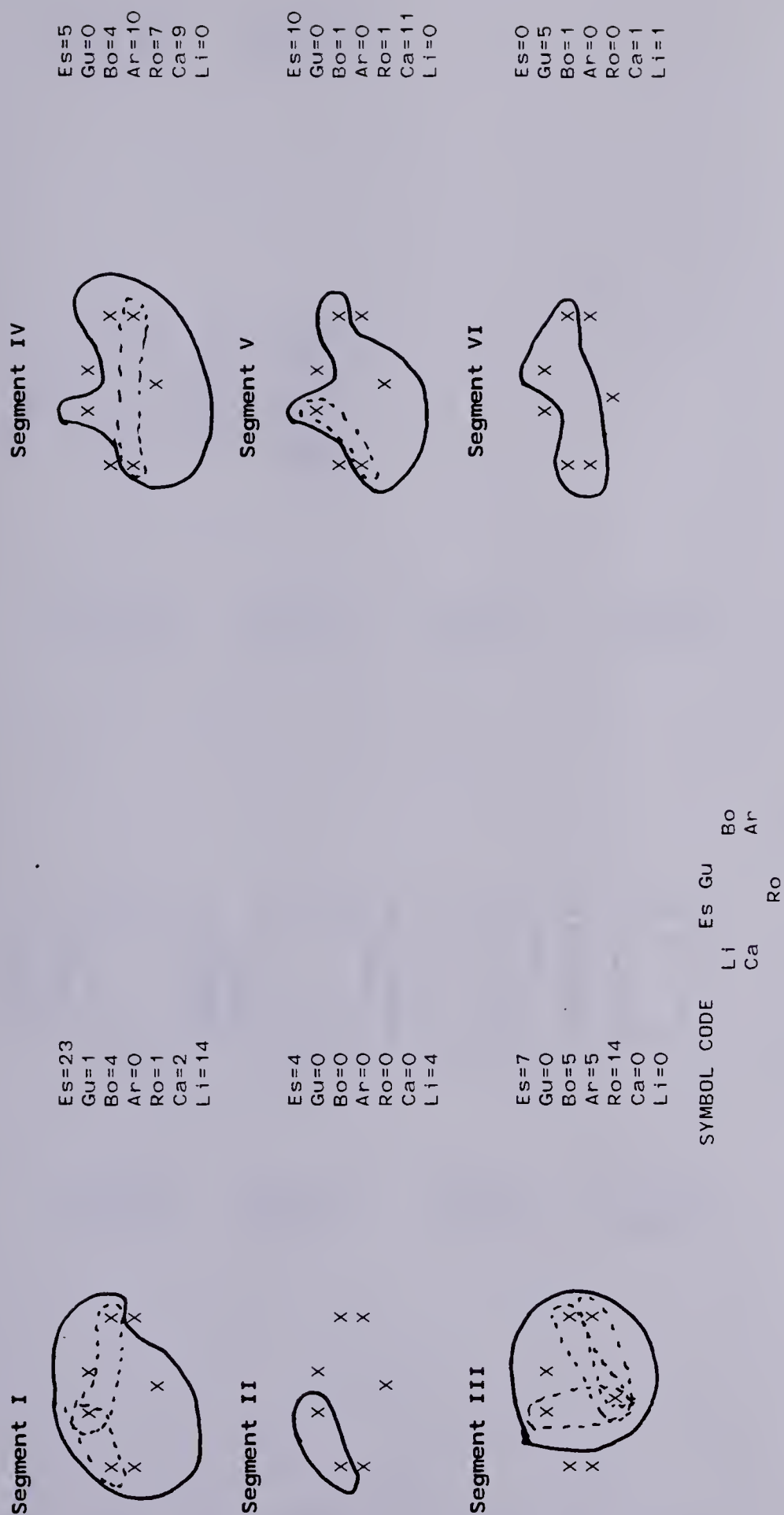


Figure IV. Visual Conceptualization of Segmental Verbal Interaction Between EPC Members--February 6, 1983(Session IV)

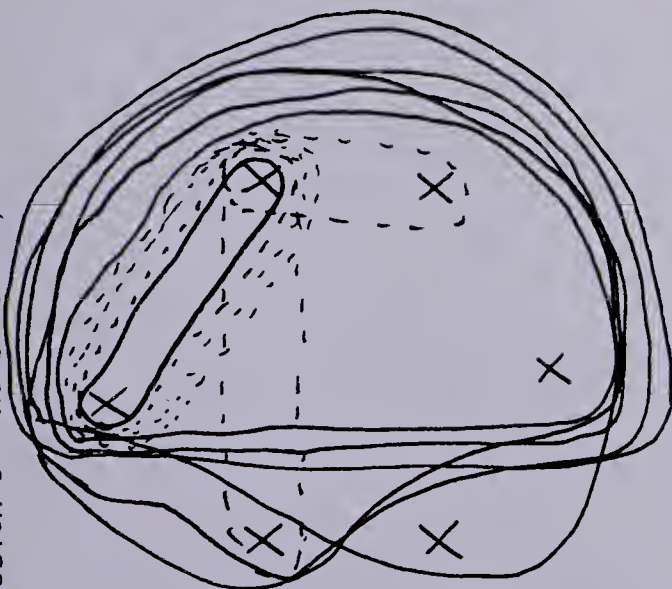


Figure V. Visual Conceptualization of Segmental Verbal Interaction Between EPC Members--February 20, 1983(I-X)(Session V)

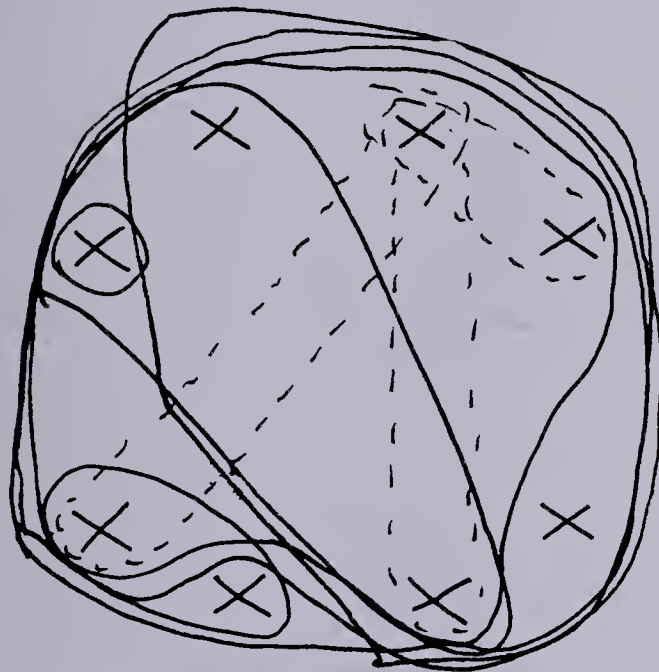


Figure VI. Visual Conceptualization of Segmental Verbal Interaction Between EPC Members--February 20, 1983(XI-XVII)(Session VI)

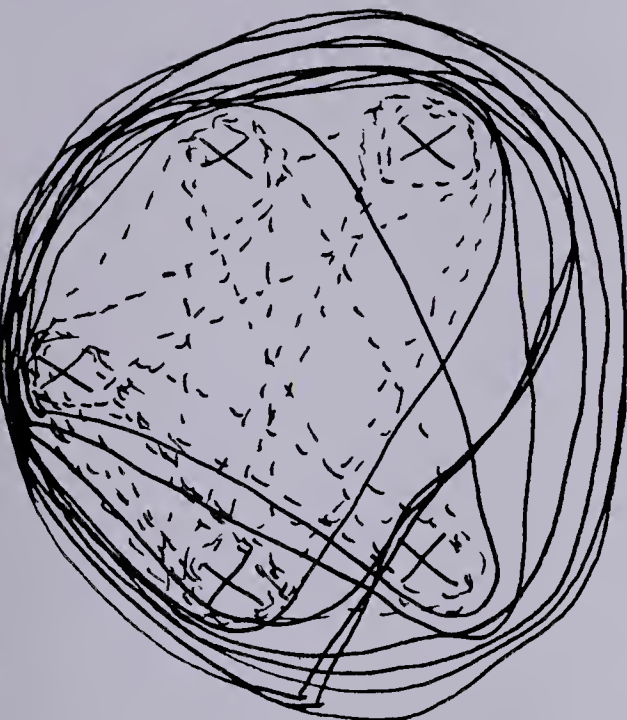
Session I - November 26, 1982



Session III - January 20, 1983



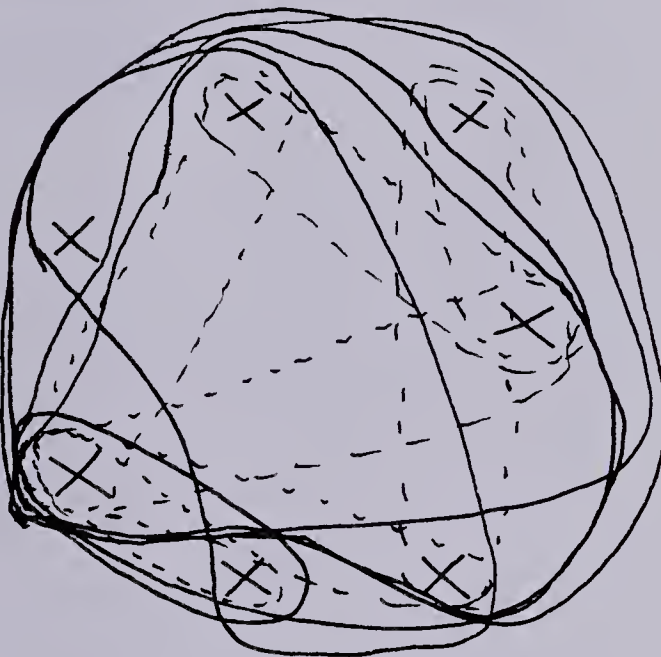
Session V - February, 20, 1983 (I-X)



Session II - January 6, 1983



Session IV - February 6, 1983



Session VI - February 20, 1983 (XI-XII)

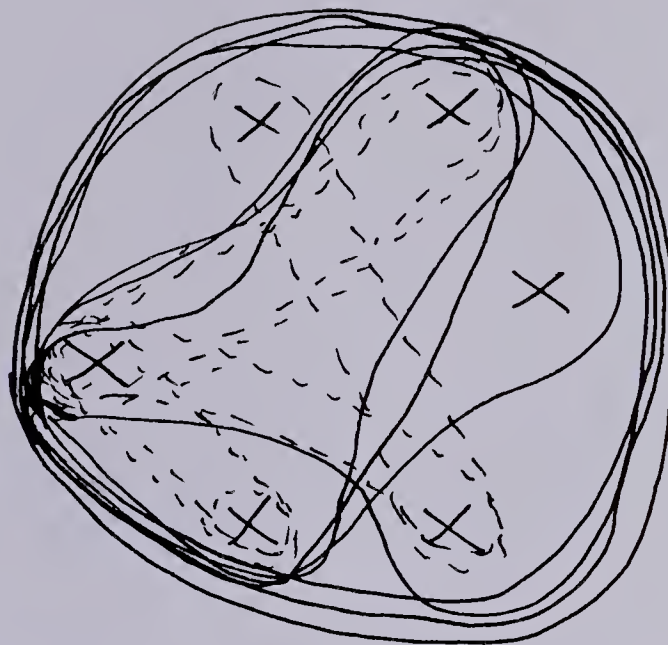


Figure VII. Visual Summary of Each of the Five Debrief Sessions

APPENDIX 2
Debrief Samples

APPENDIX 2: Debrief Samples

DEBRIEF 1: November 25, 1982

Es: Anyhow when talking about yours I'd like to make one point for you. It's kind of a system's observation about how her and the process of the interview where she really indicated that there were some changes...

Bo: Hm...Hm

Es: She really thoroughly disqualified those changes in favour of creating new problems. It's really more important for her to see problems than it is to notice differences.

Bo: That's what came, yeah...

Es: Um...I contemplated just at the end of coming in and apologizing for getting excited about her changes and having just gone clear off the deep end and thought those changes were relevant and significant when obviously they weren't. And of course there are the problems which are of much more concern than anything which has changed for the better and I really apologize for getting carried away.

Bo: I wish you had...for she just didn't take any credit at the beginning or...

Es: Well, she would take a little credit and then disqualify it and she would take it and give it back again and I think that's part of how she creates and perpetuates S's problems...If the school does do something right, is she going to pay attention to that or is she going to pay attention to what they didn't do?

Bo: Yeah...Yeah, particularly that it does come across in a particular way that she's going to understand and to something else...you know so...yeah I think that that's true and I also get her point too, in some ways we may be making a very complex situation out of the fact that this girl needs a few lessons on ...how to make friends and...

Es: What would you bet on that if we gave her a few lessons on how to make friends, and really got her into a position where she coopted into doing so where she made friends so she had a few friends. Do you think mother would accept that?

Bo: I think she would probably do what her friends wanted her to do and what her mother doesn't want her to do.

Es: I don't think she would accept that. I don't think J would accept that. I think she would accept it and then disqualify it and say "but...she still won't stand up for herself".

Bo: Okay...I can see that. She made a step and she still wants...Yeah I could certainly hear...

Es: So then she could never attend to this girl's accomplishments. She can only attend to her deficits...

Bo: Yeah, the overriding message that comes through is that this lady is really uptight and scared and she's panicking now...

Es: ...over decisions that she will have to make in three years from now.

Bo: Yeah...I guess I really get caught up between two worlds. I can really hear a lot of validity in what she says in terms of...

Es: I'm not questioning the validity. I'm questioning the pragmatics What is the impact on the relationship?

Bo: I guess I would almost be more interested in giving it a go. I think that unless there's some concrete changes made...I think that if we don't prove that we can work with Sandy and she doesn't make some changes and then J disqualifies them, unless we work with the current information, I don't think J is going to listen. I think she's going to look for someone else who can teach her daughter to make some friends.

Es: I'm willing to do that but I think I'm cunuing a rattle when we do that pragmatically

Bo: Oh, I'm not saying that we teach her skills. I think there are lots of other ways of getting this kid out...

Es: Oh, we can get the kid in here and we can do alot of work with her in terms if she needs the help and if we can help, if there are ways that we can help her. Fundamentally I think it's the mom that needs the help and not the kid...so in a sense what you want to do is to help the kid in order to help the mom, and to me pragmatically that is backwards because it is impossible, I mean it is like sending your brother to the dentist...

Bo: She's already gone through a couple of years in therapy

or a year in therapy that was focused on her getting over her problem so that she could help Sandy...

Es: Right

Bo: ...so she's not going to buy the line that we want to help in order to help S

Es: (strange voice) I'm not saying that that's what I have to sell her.

Bo: Okay but even the fact that I haven't been seeing S is a message to her that we're seeing it as her problem and not S

Es: ...Which is not true because the intervention was very much directed toward S it very much had an impact. It had a double barrelled impact, both of which were throroughly disqualified. S did go on with her piano practise after the quarter and after she left. In fact she went off on her own and came back to ask when she had trouble. What more does she want? I mean isn't that a sign of difference? (PAUSE) She in turn, became less protective of S and watched S have more fun at school. Do you notice that change or do you ignore it? So in a sense she told us how S had changed and how she had changed. We reacted to S's changes and we reacted to her changes. She disqualified the whole business; now you're saying if we make more changes in S then she'll begin to notice

Bo: No

Es: Or you're saying if we work with S directly and then there are changes she will notice

Bo: No I'm not even saying that

Es: If we don't work with S she will...

Bo: Will you shut up for a minute?

Es: Well let me gues (laughs)

Ar: Now wait...

Ro: What is this?

Es: Twenty questions (laughs)

---END OF SEGMENT---I

Ro: I was kind of...

Es: Go ahead

Bo: Go ahead

Ro: No I'm just wondering the last conversation we had and (to A) you weren't here at the time we came up with quite a different direction at that time and that was that the mother needed help yes, but what the mother needed or what we thought she needed or what would be one way is to assert her to be an authority and to be more an authoritarian and to tell S what to do, supporting the mother and really asserting herself in certain respects and it was framed...you wrote it down...that the mother was not, anxiousness about S was not the real problem, but she was anxious about being a parent, her authority as a parent. We were thinking of going off in that direction. (Pause) It wouldn't be so much a problem of her personality but more the problem of what she has read how she thinks parents should be...in terms of sending S to this free school and all those things that came up like S went to the...

Bo: Carraway

Ro: ...for two years and then went back to the regular school and had more problems. I think the parents are very much into a liberal approach and I think she might be overdoing it and she might be far too much afraid of just saying here "well this is what I want and I'm the mother and you do it and there's just no way out of it" and I think that may be a different way of helping her that gets away of accusing her of having personality problems.

Es: Yeah, I was just thinking that could seem to...

Ar: Well I...some of the reasons why the initial statement of me congratulating her about their relationship being so ideal...having the ideal mother daughter relationship, that's why it would have taken her back because if her perception of her relationship is very far from us, very far from being ideal...

Bo: I think it is...she kept alluding to the problems

Ar: Right...its kind of who's the crazy one here? Whose perceptions are off? What do you mean then...One thing which you said inside which I think is real important with respect to the direction you choose to go with this lady...one thing which was apparent was...after when she was going through some of the disqualifying and doing some of the talking about what she thought was

appropriate for S, she became calm and real comfortable, appeared to be real comfortable being in that particular kind of mode and your statement Es was that...by contrast to the other statement or when talking about changes, getting her to acknowledge changes, or getting her to acknowledge S's strengths rather than her weakness then she starts to become more uncomfortable. So in order to help her focus into a state which would make change more feasible, it may be important for her to be in that state of discomfort than in a state of comfort in order to get a shift occurring. Do you follow what I'm saying? You're looking at...

Bo: That she needs to be more uncomfortable than comfortable.

Ar: That's right...yeah, it's only one of the things to focus on in terms of what can you do at this time that tends to shift her out of that kind of comfort...

Bo: Criticizing S

Ar: Sure...yeah

---END OF SEGMENT---II

Bo: (To A) Getting back to your statement. I think that basically the presupposition that she's going to continue to disqualify S's improvements is valid. I think that in some sense we almost have to go through the motions with her though so she in fact has the evidence in front of her before she's going to hear anything we might say

Es: I'll

Bo: (strongly) I think the motions have to be gone through with S (Pause)

Es: Let's say that...Let's say...

Bo: ...and the change happen and the disqualification happen for us to have a handle on working with her for if we simply give her our impressions of what's going to happen she's going to disqualify us and I think she's going to find somebody else.

---END OF SEGMENT---III

Es: Okay...so strategically then to get S in here next time. What next?

Bo: I don't know, yeah

Es: OK, so you spend some time with S...OK...Then how do you deal with S at that point? Where do you begin?

Bo: I haven't a clue (laughs). I would just talk with her for a while...

Es: Okay

Bo: ...And I really don't know what would be strategic to work with...with her. I would probably start by complimenting her on what I've heard she's been doing and it sounded like her plan last time was certainly effective and allude to the fact that she was doing some really neat things and since her ideas worked so well last time I'd like to hear some more ideas of what she can do now because she's a couple of months older, a lot wiser (laughter)

Ar: (jokingly) Well I don't think it will work. It's too pat. It's too strategic, too apropos...(unclear)

Li: (unclear) Bring in her friend

Ro: You mean she has a friend?

Bo: That's what they were saying that her mom was saying that she plays with this girl at recess and that they have a club, her and her friend formed a club for grade one which again puts her in a leadership position.

Li: She did say that!

Bo: Yeah

---END OF SEGMENT---IV

Co: With S do you think its better to encourage changes that you've seen or warn her against them and maybe to go slow?

Bo: I don't think it would hurt to say it sounds like you're going too fast but at the same time I think that I'd like to give the message and I'd want her to start thinking about, maybe plant some seeds for whatever steps she might be taking maybe around Easter or something (laughs)

Es: I think she'll give you cues too, like "gee, I don't know" when asked if she thinks she's going too fast. Then just watche the cues you give back to her and if

she says "oh, no"...I really give up...okay it gives you a sense of direction.

Co: OK

Es: And you might get just a very affirmative response. It's hard to say but going with the kind of pacing that you're getting now...by that time if you're going to talk to her the way you're talking about talking to her, you'll get some indication if she's with you or not

Bo: Yes

---END OF SEGMENT---V

Li: It was interesting with the alliance she had with you after Da left...It was like she agreed with you totally that she didn't understand the message, wasn't sure about it...

Bo: called resistance (laughter)

Li: ...And even the speed with which she talked increased, her energy levels were higher

Ar: I kept waiting for you to intervene at some appropriate time because as I said inside I don't mind giving it out when they start questioning it then I start to get real confused as to...

Bo: Well she disqualified or she rejected it very strongly. She wouldn't have nothing to do with this vague psychopath

Es: Well initially it hit her hard really physically jarred her so regardless of what hit her something did and at one point she gave you some feedback that indicated she knew exactly what you said...when you were more vague than she was, you remember that, don't you?

Li: Yes, yes

Es: You listen to that tape and it's just remarkable what she says on that tape and it's absolutely clear in terms of what we talked about earlier in the day saying to her...

Bo: Hm...Well initially what she said was that they had the ideal relationship...she was responding to that one too. I think she was shocked that I came back that way with my...

Es: Nice delivery

Bo: Yeah, Da was in ther talking on...(unclear) (laughter)

Ar: What! Just waiting for my start...I was going to turn to tell you a few. I thought De, let me tell you some of the stories...(unclear)

Es: And the neat thing when she said that back to you and you paraphrased it because...wasn't that the point where I said that Da is beating around the bush right now and Ge is saying "that's right" (laughs) and instead he paraphrases it

Li: If she learned the skills then she would just be doing it to please...

Bo: To be a good girl

Li: To be a good girl rather than acting independently so the nice...

Bo: Yeah it's important for her to be a good girl. That may be something to work with next time too

Ar: Well yeah it seems more appropriate that even good girls pause

Es: Do they? (laughs)

Ar: Extended pause...double extended pause

Bo: From something naughty from time to time although I think she probably does.

Ar: From time to time.

---END OF SEGMENT---VII

Bo: I would really like to calm her mom down with all this anxiety and all her worry.

Ar: It's a mother's lot

Es: Yeah, calling anxiety usually has a very deleterious effect

Bo: I think she could be accurate about one thing. It could be very hard for this mother to give that girl support because of her anxieties

Es: Doesn't stop her from trying and she's the one that wants to set up therapy sessions. She's the one who wants to take care of things, she's the one who wants to

bring about the resolutions. That's divine. Covertly its hopeless. Overtly it 's never hopeless...That kind of contrast is in her, suits her overt statements and covert statements.

Bo: I think that was in fact what she was stating herself that because S can experience her anxiety it's very hard for her to give support becuse S knows she's anxious

Es: So she opts to give her support through other people

Bo: Yeah...so

Es: Well the underlying assumption is that S needs her support...or protection...somewhere that's an underlying assumption, S needs her support

Bo: That's true...Tell you what, I'll crawl up on that table over there

Es: We've better get a whole bunch of forms from downstairs...

---END OF SEGMENT VII---
---END OF DEBRIEF 1---

DEBRIEF 4: February 6, 1983

Es: And, you know, you started giving her the message that there is a minimal of faith in her for the most part. People are starting to say "she won't do it".

Li: Hm...Hm.

Es: I wouldn't bet against it, you know and she's going "why (simultaneous conversation) What am I going to do now" and then you say "what you did for a month" and so she says "That's not good enough".

Bo: Yes

Es: (stresses) ah...ah (snaps finger) bingo! She's got you again. You say "You'r right! Let's negotiate! Let's make it six weeks. (laughter)

Gu: She said it's too long

Es: I know but you always negotiate and up the ante. You never compromise

Li: It's good...

Es: And if it's too long a month six weeks is even longer and it could get worse next round. Right?

Ca: We go back to a month

Es: Are we going to do it or are we going to get off?...No, you don't go back to a month

Ca: No, she goes back to a month

Es: She might try you see

Ro: Do we go back to five weeks?

Es: Seven weeks! (laughter). That's right! You up the ante again...so that she starts to worry again so that the next round will be even worse. So she ...

Bo: (interrupts) Under what pretense would you not up the ante? Considering it...Just say for example the month was an overestimate to begin with

Es: I would alter that if I heard from somebody like the Rebtin's who say "that isn't a good week-end". We talked about that earlier and we negotiate around that. But with someone...

Bo: (interrupts) When you give them a week's assignment would

you always want to spend a month like you know...

Es: Well I would do it if somebody said "well can't we wait two weeks! if I say a week and they say can't we wait two weeks and I say "well no let's make it next Wednesday instead of Friday". So then again I up the ante in my direction but it's a real powerful ploy when somebody else sets the time for the next interview. I mean they set the first fundamental condition of what's going to happen.

Bo: So how about saying we'll make it from three to six weeks?

Es: With her I won't do that. I mean she is basically in a position now if she is going to work with us, she is going to have to comply with us.

Li: But you see...

Es: (interrupts) And also start complying to the extent that she's going to be unquestionably responding to something.

Li: (strongly) But I'm confused, Es, because one of the instructions we had...I had was, oh...

Es: (interrupts) I know that

Li: That's what I was getting confused with

Es: Okay, I can understand that

Li: You see, because we had said she would call us when she was ready

Es: Right so you went back and used that. I can understand that. I think that was appropriate thing to do. What I'm saying is that on a situation where this kind of thing happens.

Li: But with her that instruction even though, you know, I remembered it, would that have been accurate though? Would it...

Es: Oh yeah

Li: It would have been

Es: Sure!

Li: Okay

Es: That is, you know, if we hadn't set, you know...

Li: Well because I had introduced the idea of a date. Okay.
I appreciate what you are saying now. Alright.

Es: Yeah if at the beginning where she hadn't carried anything out and this kind of stuff. Then if we would have gone with that chain, then it would have been pretty appropriate.

Li: Okay, but as soon as I suggested a month and she got into "no, but" and I followed and flowed in it with what I was saying, and I lost her, in other words, because I didn't have the power of the therapist.

Es: Hm...Hm

Li: Okay

Es: But she waffles all the time. And she was going to do something and she wasn't and she was going to do something and she doesn't do it. She needs more time and she still doesn't do it.

Li: Yeah

Es: She justs, I don't see her in anyway or in any kind of position to ever change. (Pause) I saw her close to it where we basically said "I don't think you're going to do it". We bet against her! You could even say "oh, oh", Es wants you to come in a month to prove he's right (pause) because he wants to collect on his bets (pause) and make me a son of a bitch. (laughs) She's interesting. She's fascinating,. (pause) kind of have to bounce her off the wall or whatever you do, it has to bounce off the wall before it gets to her. I don't feel bad about missing her though. She's tough.

Li: Hm...Hm

Es: I would like to learn something from her.

---END OF SEGMENT---I

Li: What would you have done different? (Pause)

Es: Probably one of the things toward the end when she was into that shtick about J being a bum...

Li: Hm...Hm

Es: I would have asked her if she mind having J give us a call so we could make an appointment to deal with his problem. And that at the moment she's able to convince

him that he's really the problem to the extent that he'll be helped for it, we'll see him

Li: Hm...Hm

Es: But until he's convinced by her, we see little sense in seeing him. So her job is to convince him that he's really the problem, not ours. We believe he is, he doesn't. (laughter) That's one possibility. So you stick her with the job for getting J to acknowledge that he's the one with the problem. She says he is. (unclear) that he presents a problem but that he has a problem for which he has to come in and see us for help.

Li: Hm...Hm

Es: At that point he can contact us and make an appointment. (pause) That's one possibility.

---END OF SEGMENT---II

Ro: I was just wondering...We talk alot about resistant clients or what we perceive as resistant. Like we talked about it a little while ago saying also that it's nonsense to talk about resistance. There's no such thing, it just means that we haven't managed to understand her system yet. I'm just wondering which other ways there would be to attempt to attack that. All we're doing now is challenging her. I'm not really...

Es: Well one of the ways...

Ro: (interrupts) I'm not...I'm not really clear about all this, but I'm just wondering if there would be a totally different approach to working with her.

Es: One of the ways I suppose would be to acknowledge that J is the problem and that the challenge is in having J acknowledge that he has a problem and we don't know how to do that and so we have to find another way to deal with it

Ar: I think one of the ways to, would be to...At this point of time, we've only been offering her one suggestion how to do something slightly differently. I would say that on two previous occasions that she's very good at not doing what we suggested for her to do so perhaps if we had linked a couple of suggestions together, two that we had that, somewhat sure, that she probably would have rejected...um...you know, when you link things together in terms of hypnotically, you can get people to buy at least the last of the bunch and so we could have just

changed some things and see if that made a difference.

Ro: Yeah but isn't that still the same strategy and that's still...

Ar: (interrupts)... kind of except...except the only thing we're doing then is allowing her...We are actually giving her something to resist, so she can resist suggestion one, she can resist suggestion two and buy suggestion three or she can resist suggestion three and buy suggestion two. But she gets what she wants and we get what we want.

Ro: I guess I'm so fuzzy about this, that's why I can't explain what I want. But that's why I'm thinking of a different approach and not really giving her more of the same.

Ar: Sure

Ro: Like give another suggestion is like more of the same

Ar: Hm...Hm

Ro: So I'm just thinking if we could do something else or if there would be another possibility not that we have to do it but generally speaking with resisting clients...

Bo: Like how to engage your compliance in a different way...

Ro: Yeah

Bo: Instead of challenging them in the first place

Ro: Hm...Hm

Es: Well, the possibility exists of course that we give her a set of instructions that's formulated around the types of things she's been doing

Ro: Hm...Hm

Es: In other owrds to prescribe exactly the things that she's doing now!

Ro: To see if she listens

Es: Or if she argues with

Ro: Okay

Es: You know because if there is a pattern and she wants to counter us that counteraction may continue. And if it does, she may have to switch around to some other

counterform of reacting. And if she is compliant, we keep that compliance and see if we can gradually move that compliance into something else. I can see that as one possibility.

Bo: (To Ro) What I heard your question being is there some way of moving out of the compliance resistance game totally...

Es: (To Bo) Hm...Hm

Bo: To deal with her

Ro: (To Bo) Sure

Bo: Like proposing a different...

Ro: (Interrupts) I wouldn't know what. I mean that's why...

Ar: Could try metaphor. (pause) Don't ask me what. Could try metaphor, where we're not offering her anything but we're operating out of the illusion of offering her something. She makes of it what she will, does with it what she wants. We'll congratulate her for what she's done or hasn't done, how successful she's been in accomplishing her goals.

Ca: Why is it...

Ar: (Interrupts) (To Ro) Could have sent you in to do a (unclear) on her, come in and frightened her

Ro: Nope (laughs)

---END OF SEGMENT---III

Ca: But why is it do you think when you, at least I observed this about her and saw it again today, give her a prescription what she does is rub it away and at some point or other she comes out and tells you about one of her own things and tries that parallels one of your prescriptions. For example, the family council. I went in and I said "Everybody just forget who everybody is and just start to get to know each other and blah, blah, blah". But it's like most people come and they expect a pill and then some spontaneous change but she still wants to invent the pill herself so to speak. It seems like that to me.

Ro: Well if that is her pattern maybe we should go with it. I don't know how but...

Ar: Next time she comes in will give her a box of sugar pills

Ca: (To Ar) No you couldn't because they're your pills, not hers!

Ar: We could tell her only 50% of them will work and 50% of them are placebo.

Bo: Yeah I think that...

Ca: (Interrupts) You know, for example, she goes in and says "Look, we'll forget about all the bad things right" and that's very immediate. It's time bound. It's right now and we can start again and a prescription like that is a thing that you do.

Ar: (To Ca) But Ca, she also...she undermines that even if she said it because then as she went on, what she followed up with was things like dealing with resentment and establishing rules...

Bo: (Interrupts) And how kids get cut of T.V. even though it never helps

Ar: (To Bo) That's right. Now if you're starting out fresh then you don't have any resentments until something happens in the fresh start that you're resentful for. Or you don't establish rules if you're starting fresh.

Ca: Oh yeah

Ar: Until a behavior occurs that transgresses the rules

Bo: (To Ar) So she undermines her own prescriptions

Ar: (To Bo) That's right!

Ca: (To Ar) Oh I realize that but all I'm keying on is the fact that you give her something and she pushes it away and then tells you about something that she gave herself

Ar: (To Ca) Hm...Hm

Ca: And didn't work

Ar: (Simultaneously with Ca) Patterns are the same

Ca: (Simultaneously with Ar) That didn't work and failed

Ar: (To Ca) Yep, patterns are the same. She undermines what we give her and she undermines what she gives herself. That pattern is real simple.

Ro: (To Ar) Hm, no. (To Ca) How often have you seen this? I mean I've never seen that before

Ca: (To Ro) Well I heard it in the time I was seeing her and I heard it again today. Like this thing came out of the blue, this family council thing, right in the middle of therapy, right in the middle of getting many...

Es: (Interrupts) We asked her first of all whether anything had changed. She didn't mention...

Ar: (Interrupts) She didn't bring that out

Es: When did she bring that up? Almost near...

Ro: (To Es) Almost at the end

Es: Well it was while I was in the room

Ro: Yeah then she was explaining why it wouldn't work or why she couldn't implement it when we were suggesting about J watching T.V.

Bo: Mind you when you ask her if anything had changed, she always goes back historically two months

Ro: Yeah

Ca: She gets on the track and starts...

Es: And everything she says about him is negative. I suppose the simplest order in that is to say "I want you to find out every fault your kid has. Every one! Leave out nothing!...if you want to". I mean if we're looking at patterns (unclear) don't get us locked into our own difficulties with her. That would seem to be the most expedient thing. Because I think the thing you were saying earlier (To Ro) is that how do we lock into her in ways that we come to help create our own difficulties. How could we step out of that?

Ro: (To Es) Yeah things like that

Es: And if we then remove that from the context that says anything but the fact that we get locked into something, the most logical thing would be that we identify something that is a really substantive pattern that she has and when we look at it, basically when she talks it's wrong. Even when she's smiling and she says it, it's wrong. Like what he did at school...like at one level she's proud as hell with what he's done and at another level she's complaining about it...and if we ask her to identify everything about him, leaving out nothing and that we want to know every one of those

things, we simply read her while she's going through her list...How many is she proud of and what ones really upset her (Pause) and then we can ask her to sort through her list and identify which ones she's proud of and which ones she isn't.

Ro: (To Es) Hm...Hm (Pause)

---END OF SEGMENT---IV

Ca: I was just thinking about what you said (To Es) a minute ago in terms of locking into her in such a way that we fail. It sounds like you're saying that this would be a better way to approach it but it sounds...um...well a little bit like it's in the same model and has the same pitfalls in it that we're locking into her

Es: (Interrupts) Well, just a minute...

Ca: ...in the same way

Es: Just a minute. If she does what we ask her to do in finding those faults, then we're not locked into her. If she doesn't do it and comes in with something else instead then we're not locked into her.

Ca: (To Es) But that has been the problem in that she has slipped out from under.

Es: (To Ca) But it slipped between them I think...well almost slipped between them. I think we had a good start and then we decided to alter our strategy to find out if she would move in a change pattern. She answered the question for us. Where we began with this woman if you remember, our first contacts was to give her the impression that she was not going to make any changes and that we had encouraged her not to.

Ca: Hm...Hm

Es: And she didn't. So in a sense we can say that she started out, if we're going back into compliance language, she started out compliantly

Ca: Hm...Hm

Es: Then we did the change test and she turned it down flat. She didn't do a damn thing although it looked on the first occasion that she was buying it. She came back and we wanted a second chance.

Ca: (To Es) This is the thing. You give her a prescription

and she slides in between them.

Es: (To Ca) Not the first one

Ca: (To Es) No, not the first one but every subsequent one.

Es: (To Ca) Everything we've tried to get her into, we've let her into the possibility for a change. She said that that was what she wanted. So the change prescription was given and she didn't do it.

Ca: So now if you give her this new prescription that you mentioned (To Es), what makes you think that she won't treat that any differently than she's treated any others and slide inbetween?

Ro: (To Ca) That's why we predicted that she would.

Ca: (To Ro) Except that I think my well, correct me if I'm wrong, but I thought that was kind of your point. That that's the system we're using and she's trying to slip in between and so to give her another one from that stance will be dealt with in the same way. She won't make a list of all the bad things her son does and miss nothing. I mean she'll slip out from under that some way.

Es: (To Ca) How?

Ca: (To Es) Well maybe the same way she's done before

Es: (To Ca) Could be, could be

Bo: Well I think it's time to stop

Es: Or the option is to say we want to ask her to do something and we want her to find some way of slipping out from doing it

Ca: Yes (Laughter)

---END OF SEGMENT---V

Gu: I think I'd like to refer Xa to you, Gr's mother

Simultaneously: Oh

Gu: I had a great time last week. No that's not the reason

Li: What is the reason?

Gu: Oh you should see her. It'll be a real challenge

(Laughter)

Ca: You think Catalina is bad!

Gu: She's a very defensive lady and likes to...

Bo: I'm not sure if she's a good referral for us

Gu: (To Bo) You're not sure of what?

---END OF SEGMENT---VI

DEBRIEF 3: January 20, 1983

Segments V and VI

Gu: I was thinking I should give you a little more information on this situation with Gerald and the people who are involved with this family. Actually right now I'm Gerald's social worker the child worker and his mother's social worker. She has three other children in her family so there's another one who I'm the social worker of that kid too. The --- have another social worker for their family. She sort of handles the family and all the kids that are in there but no other. The other two foster children that are there. She handles any of the foster children who are in that family and these parents are parent counselors. They're supposed to be a specialized foster home where you put more difficult children rather than regular kids that don't have any behavioral problem except that when we put a third child in we didn't know, I didn't know I was the one who place Gerald there and the other girl who lives in their home also. I didn't know that they couldn't function with more than two children in their home. Two foster children and it was on the records but there was no social worker handling the family at that time. There was like the other one had quit and there was no one handling it so when I referred the third child to their home they started having problems with Gerald and then they weren't having problems with Gerald anymore. They were having problems with the other foster child and when we look back on the father the new worker began to be involved with this family it was found that whenever they have more than two foster children they have a lot of difficulty coping and um...at the same time Gerald was learning from his mother that he was going to become a permanent ward and he was going to remain in their home for an indefinite period of time so it was like a third child just coming in and this was happening to Gerald so he reacted quite negatively to this news. Also I think it made it a lot more difficult for these people to cope. Right now they are not having problems with the other foster children just with Gerald so it's focused on him this time but Gerald's mother is very much like he describes you, I don't consider her as the most thorough person in the world but she's a most difficult lady. She's very much like Gerald in the older version. She has four children and Gerald is the oldest of the four. She has three other sons in her care and this summer the son who is just a little younger than Gerald returned to her care whereas Gerald stayed in care because we had made regular preplacement visits with both sons to her home but all the visits with Gerald were not successful. With the other child it was working but with Gerald it was not successful at all and she decided too, that there was nothing she could do with this son and what I

thought was a little ironic was they were saying she does everything he tells him. Her complaint was he does nothing that she tells him. When he's in her home he just doesn't do anything that he's supposed to do, gets the other kids involved in trouble and all sorts of other thins...so...

---END OF SEGMENT---V

Li: It's 6:30

Es: We're going to have to mark the tape.

---END OF SEGMENT---VI

---TAPE ENDS---

University of Alberta Library



0 1620 0392 0921

B30384